



## Research Report

# The Resource Allocation of Foundation Funding for Arkansas School Districts and Open-Enrollment Charter Schools

## School-Level Staffing

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**THE HOUSE INTERIM COMMITTEE ON EDUCATION  
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# CONTENTS

<b>Introduction</b> .....	<b>1</b>
<b>Data and Methodology</b> .....	<b>1</b>
Foundation Funding Expenditures .....	1
Expenditures From Other Funding Sources.....	2
District and Charter School Employees and Salaries.....	3
Statute and Standards.....	3
National Comparison Data.....	4
<b>Education Funding in Arkansas</b> .....	<b>4</b>
Foundation Funding Overview .....	5
The Matrix .....	6
Legislative History .....	7
<b>School-Level Staffing</b> .....	<b>8</b>
Classroom Teachers .....	9
Background: Classroom Teachers in the Matrix .....	9
Actual Staffing Patterns .....	10
Background: Teacher Salaries in the Matrix .....	11
District and Charter School Expenditures .....	12
State Ranking: Staffing and Expenditures .....	15
Special Education Teachers .....	16
Background: Special Education Teachers in the Matrix .....	17
Actual Staffing Patterns and Salaries .....	17
District and Charter School Expenditures .....	18
State Ranking: Expenditures .....	20
Instructional Facilitators .....	21
Background: Instructional Facilitators in the Matrix .....	21
Actual Staffing Patterns .....	23
District and Charter School Expenditures .....	23
State Ranking: Staffing and Expenditures .....	27
Library Media Specialists.....	28
Background: Library Media Specialists in the Matrix.....	28
Actual Staffing Patterns .....	30
State Ranking: Staffing.....	30
District and Charter School Expenditures .....	31
Counselors, Nurses, and Other Pupil Support .....	33
Counselors .....	34
Nurses.....	39
Other Pupil Support Services .....	44
<b>School-Level Administration Personnel</b> .....	<b>49</b>
Principals.....	49
Background: Principals in the Matrix.....	49
Actual Staffing Patterns and Salaries .....	50
District and Charter School Expenditures .....	51
State Ranking: Staffing and Expenditures .....	53
School-Level Secretary.....	54
Background: School Secretaries in the Matrix .....	54

State Ranking: Staffing.....	54
District and Charter School Expenditures .....	55
<b>District Comparisons.....</b>	<b>57</b>
Districts and Open-Enrollment Charter Schools.....	57
District Size .....	58
Poverty Level.....	59
Student Achievement .....	60
Overview: FTEs and Average Salaries .....	61
District Survey Responses.....	61
National Comparison.....	63
<b>Conclusion .....</b>	<b>64</b>

## INTRODUCTION

Arkansas Code § 10-3-2102 requires the Education Committees to “[r]eview and continue to evaluate the amount of per-student expenditure necessary to provide an equal educational opportunity and the amount of state funds to be provided to school districts, based upon the cost of an adequate education, and monitor the expenditures and distribution of state funds and recommend any necessary changes.” The law calls for this requirement to be accomplished by completing a resource allocation review. This report serves as the second part of that required review.

Arkansas's K-12 education foundation funding formula, referred to as the matrix, is used to determine the per-pupil level of foundation funding disbursed to each school district. The matrix was not intended to reimburse schools for actual expenditures but rather to provide a methodology for determining an adequate level of funding to allow schools to meet the state's accreditation standards and adequately educate Arkansas students.

This report is the second in a series of three Resource Allocation reports that compare the funding and staffing levels of the foundation funding matrix with the actual expenditures and staffing levels of school districts and open enrollment charter schools. This report examines school-level staffing and expenditures. District-level resources were addressed in this March 2018 report: <http://www.arkleg.state.ar.us/education/K12/AdequacyReports/2018/2018-03-26/ResourceAllocation-DistrictLevel-Resources18a.pdf>. School-level resources will be addressed in an upcoming report.

## DATA AND METHODOLOGY

This report evaluates how closely today's schools' staffing and spending matches the matrix assumptions. It also compares the 2016-17 school district staffing levels and expenditures with those established in the matrix formula.

## FOUNDATION FUNDING EXPENDITURES

A major objective of the biennial Adequacy Study is to determine how school districts have spent the foundation funding they have received. To calculate district expenditures, the Bureau of Legislative Research (BLR) extracted data from a data warehouse maintained by the Arkansas Public School Computer Network (APSCN) Division of the Arkansas Department of Education (ADE). The expenditure coding system in APSCN does not perfectly align with the categories of the matrix. For example, there is no single expenditure code districts use to identify “technology” expenditures as recognized by past Adequacy Studies. The BLR has used its best judgment in categorizing the expenditures in a way that best fits the legislative intent expressed in past adequacy reports. The expenditure calculations in this Resource Allocation report are not perfectly comparable with numbers provided in past reports as the BLR has, from time to time, made slight changes in the categorization of expenditure codes it uses.

Additionally, precisely measuring districts' foundation funding expenditures has always been hindered by the fact that there is no single source of funds code that identifies expenditures made using exclusively foundation funding. School districts have a variety of revenues they can use to pay for resources listed in the matrix. In the district accounting system, foundation funding is placed in and spent from two account-like funds: the Salary Matrix Fund and the Operating Matrix Fund. However, other district revenues, such as excess property tax revenue, can be placed in these accounts and comingled with current year foundation funding.

To estimate the expenditures made using foundation funding, the BLR divided the foundation funding districts and charter schools received in 2016-17 (\$6,646 per student) by the total expenditures made from the Salary Matrix and Operating Matrix accounts to reach an individual percentage for each

district. That percentage was then applied to districts’ expenditures made from those two accounts to determine the portion of expenditures made using foundation funding.

Additionally, there is not perfect uniformity in the way districts and charter schools code their expenditures. While ADE’s Arkansas Financial Accounting Handbook describes the expenditure code structure and defines what each code is meant to cover, there are differences among districts and charter schools in the way they apply the codes to their own expenditures.

For each matrix line, this report provides average staffing levels and expenditures for the 235 districts and 24 open-enrollment charter schools operating in 2016-17. This report also provides the districts’ expenditures per student when grouped by district size (based on prior year average daily membership, or ADM) and by the percentage of students who are eligible for free or reduced price lunch (FRPL). This type of analysis allows for a comparison of spending patterns based on the size of a district or the level of poverty among its student population. The ADM and FRPL percentage used for each school year are from 2015-16, which was the data year used as the basis for distributing state funding in 2016-17.

This report also examines districts’ per-student expenditures based on student achievement. Districts were divided into quartiles based on the percent of students who scored “Ready” or “Exceeding” on the ACT Aspire assessment in 2016-17. Each district’s percentage of “Ready” or “Exceeding” on English language arts (ELA) assessments and on math assessments were averaged for one single proficiency percentage. The proficiency percentages were calculated using data obtained from the Office of Innovation for Education at the University of Arkansas. The following table provides the number of districts in each category and selected characteristics of the group. Only traditional school districts are included in the analysis using this segmentation (by ADM, FRPL and student achievement). Open-enrollment charter schools are included only in the charter school grouping.

	# of Districts	District Avg. ADM	Total ADM	District Avg. FRPL %	District Avg. Achievement
<b>District Size</b>					
Small (750 or Less)	79	520	41,107	71.5%	44.9%
Medium (751-5,000)	140	1,738	243,343	64.4%	48.1%
Large (5,001+)	16	10,967	175,468	56.9%	52.2%
<b>Poverty</b>					
Low Poverty (<70%)	120	2,223	266,748	56.2%	53.2%
Medium Poverty (70%-<90%)	105	1,772	186,013	75.3%	42.9%
High Poverty (90%+)	10	716	7,156	93.3%	23.6%
<b>Student Achievement</b>					
Top Quartile	59	2,712	159,995	54.4%	61.1%
2 <sup>nd</sup> Quartile	58	1,909	110,715	64.0%	51.0%
3 <sup>rd</sup> Quartile	59	1,288	76,004	69.0%	44.5%
Bottom Quartile	59	1,919	113,204	77.8%	32.7%

Source: Arkansas Department of Education, State Aid Notice; Child Nutrition Unit, Audited Free and Reduced Price Lunch, Office of Innovation for Education

## EXPENDITURES FROM OTHER FUNDING SOURCES

This report also provides information on district expenditures for matrix items (e.g., classroom teachers) using funding other than foundation funds. For each matrix item, this report includes a bar chart showing the per-student amount of funding districts collectively spent on each matrix item from foundation funding and how much they spent using all other funding sources. For each matrix item, this report also provides a pie chart showing the percentage of districts’ total expenditures that were made using foundation funding and the percentage made using other sources of funds. The pie charts describe the fund sources using the following fund types:

- **Foundation:** The portion of the unrestricted state funds that equals the matrix funding amount of \$6,646 per student for the 2016-17 school year.
- **Other State Unrestricted:** Unrestricted state funding other than foundation funding (e.g., declining enrollment funding, student growth funding). These funds are considered unrestricted because districts are not limited in the way in which they can spend these dollars.
- **National School Lunch (NSL):** State categorical funding based on the percentage of students receiving free or reduced price meals.
- **Professional Development (PD):** State categorical funding for professional development activities.
- **Alternative Learning Environment (ALE):** State categorical funding for alternative learning environments.
- **English Language Learner (ELL):** State categorical funding for English Language Learners.
- **Other State Restricted:** Restricted state funds expended from the Salary and Operating Funds other than state categorical funds (e.g., isolated special needs transportation funding and catastrophic occurrences special need funding). These funds are considered restricted because they are intended for a particular use.
- **Federal Funds:** Federal grant funds, such as Title I, expended from the Federal Grants Fund.
- **Building Fund:** Bond proceeds, state Partnership Program facilities funding or other funds used for facilities acquisition and construction purposes.
- **Debt Service Fund:** Generally consists of property tax revenues transferred to this fund for retirement of bonded indebtedness and interest.
- **Capital Outlay/Dedicated M&O:** Property taxes from approved local millage for specific purposes.
- **Activity Fund:** Admission receipts, sales, dues and fees relating to school-sponsored athletics and activities.
- **Food Service Fund:** Includes daily sales from student meals and state and federal funding for food service operations.

## DISTRICT AND CHARTER SCHOOL EMPLOYEES AND SALARIES

This report provides information on the numbers of district and charter school employees and salaries included in districts' expenditures. The average salaries in this report have been calculated using APSCN's page 3637 coding structure and data. The salaries include regular salaries, bonuses, unused leave, severance, and early retirement, but do not include other benefits, such as health insurance and retirement, or the employer share of Medicare/Social Security payments. The salary amounts include those paid from all types of funds, including federal funds.

## STATUTE AND STANDARDS

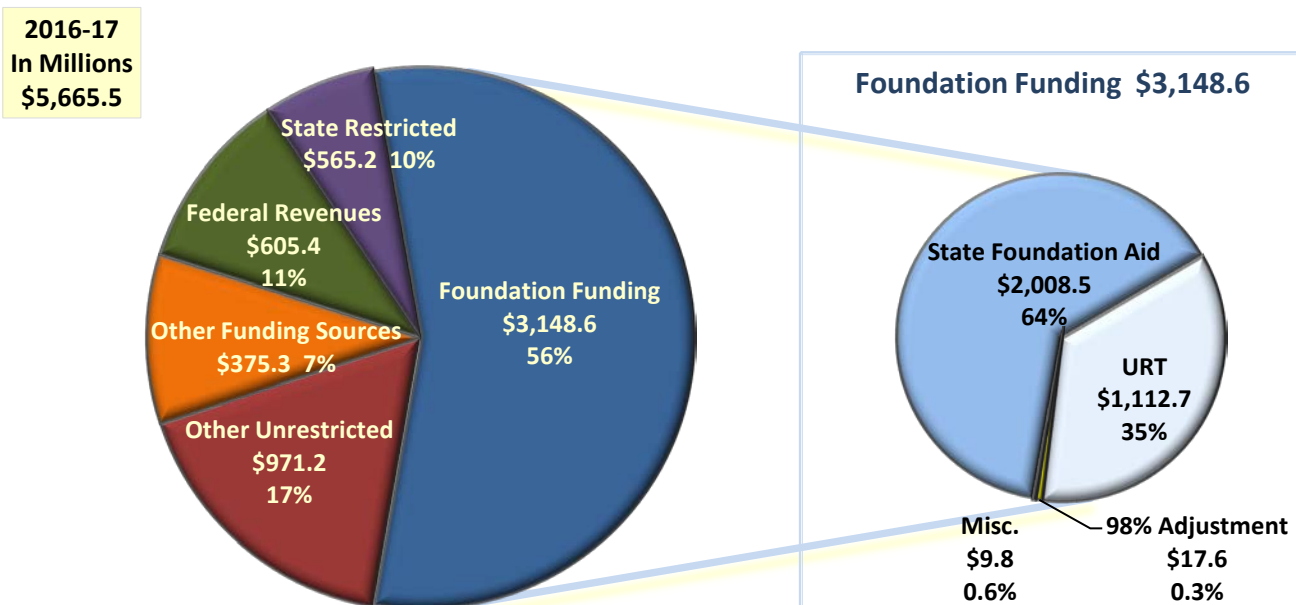
The foundation funding matrix is largely based on state Accreditation Standards (Rules Governing Standards for Accreditation of Arkansas Public Schools and School Districts), which set minimum staffing levels or required levels of resources schools must provide. One way of measuring whether the foundation level is adequate is by determining whether districts are able to meet established statutory and regulatory standards. If many districts are out of compliance on a particular standard, there may be an issue with the sufficiency of funding. However, if nearly all districts are in compliance with the standards, the funding may be sufficient for districts to meet the requirements. Therefore, each section of this report describes the relevant requirements and provides the number of schools or districts cited for non-compliance.

NATIONAL COMPARISON DATA

This report also uses data from the National Center for Education Statistics to compare Arkansas’s spending and staffing patterns with those of other states. For staffing numbers, the BLR used 2015-16 data from NCES’s Elementary/Secondary Information System. For some broad categories of expenditures per student, this report relied on the NCES report “Revenues and Expenditures for Public Elementary and Secondary Education: School Year 2014-15 (Fiscal Year 2015).” Some additional expenditure breakouts (instructional expenditures for regular program salaries and special education teacher salaries) were available through NCES’s Elementary/Secondary Information System.

EDUCATION FUNDING IN ARKANSAS

Arkansas schools receive many different types of funding. In 2016-17, school districts and open-enrollment charter schools received about \$5.7 billion in total revenue. Foundation funding makes up 56% of that amount. The following chart illustrates the significance of foundation funding as a part of districts’ and charter schools’ total revenue. The chart also demonstrates that a significant amount of additional revenue is available to districts and charter schools to meet their needs.



- **Foundation Funding** primarily consists of property tax revenues (URT) and the state aid portion of foundation funding. (The components of foundation funding are described in the next section of this report.)
- **Other Unrestricted Funds** include student growth funding, declining enrollment funding, isolated funding and other local revenue sources. School districts have broad authority to spend these funds for their educational needs without limitation.
- **State Restricted Funds** include NSL and other categorical funds, as well as funding for Magnet School Programs, Early Childhood Education, Adult Education, Career Education, Special Education, Educational Service Cooperatives, Academic Facilities and other grants for specific programs.
- **Federal Revenues** include Title I funding, the Individuals with Disabilities Education Act (IDEA), Part B funding, School Lunch and Breakfast grant funds and other federal grant funding.
- **Other Funding Sources** include the sale of bonds for construction activities, loans, insurance compensation for loss of assets, other gains from disposals of assets and other miscellaneous funding.



**FOUNDATION FUNDING OVERVIEW**

**Foundation funding** is the building block of public education funding in the state of Arkansas (A.C.A. § 6-20-2301 et seq.). Every year the state distributes foundation funding to each school district on a per-student basis. Foundation funding is **unrestricted**, meaning the state does not specify what school districts may or may not purchase with it. This policy is intended to provide flexibility for the specific needs of each school district, allowing some districts to spend more on teacher salaries, for example, while other districts may have higher transportation needs.

Foundation funding is made up of two main sources of funding: the **Uniform Rate of Tax (URT)** and **state foundation funding aid**. The URT is a constitutionally mandated minimum millage rate (or property tax rate) that school districts must levy at the local level. This rate is set at 25 mills and the revenue generated is used specifically for school operations. State foundation funding aid is then provided to make up the difference between the amount of money raised through the URT and the funding level set by the Legislature. For example, if a district’s URT generated \$2,646 per student in 2016-17, the district would have received an additional \$4,000 in state foundation funding aid, for a total of \$6,646. The two smaller components of foundation funding are the 98% URT Actual Collection Adjustment and other types of funding collectively considered “miscellaneous funds”. The **98% URT Adjustment funding** is state money used to supplement districts where actual URT collections are less than 98% of what was anticipated based on assessments. This funding ensures that districts receive at least 98% of their total URT funding when the county is unable to collect the full amount from its citizens. **Miscellaneous funds** are monies school districts receive from “federal forest reserves, federal grazing rights, federal mineral rights, federal impact aid, federal flood control, wildlife refuge funds, and severance taxes,” that are “in lieu of taxes and local sales and use taxes dedicated to education” [§ 6-20-2303(12)(A) and (B)].

Among districts statewide in 2016-17, URT made up about 35% of the total foundation funding, while state foundation funding aid covered about 64%. However, these percentages varied greatly among individual districts. For example, in the Poyen School District, state foundation aid covered 92% of the foundation funding, with URT paying just 8%. Eight districts in 2016-17 collected more than \$6,646 per student in URT alone and therefore received no state foundation funding aid.<sup>1</sup> For charter schools, which have no tax base from which to collect funds, the entire foundation funding amount is covered by state foundation funding aid.

<b>Foundation Funding Components</b>	<b>District Total</b>	<b>% of Total</b>	<b>Charter Total</b>	<b>% of Total</b>
URT	\$1,112,682,647	36.3%	\$0	0%
State Foundation Funding Aid	\$1,924,159,757	62.8%	\$84,318,554	100%
98% Adjustment	\$17,583,692	0.6%	\$0	0%
Miscellaneous	\$9,809,489	0.3%	\$0	0%
<b>Total</b>	<b>\$3,064,235,755</b>		<b>\$84,318,554</b>	

Foundation funding is distributed based on a school district’s **average daily membership (ADM)**, which is the calculation representing a district’s total number of students. Each school district receives the foundation funding amount set for each year multiplied by its prior year ADM. For example, the foundation funding rate was \$6,646 for the 2016-17 school year. If a school district’s ADM was 530 for the previous year, its funding would be determined by multiplying \$6,646 by 530 for a total of \$3,522,380.

<sup>1</sup> One of these districts was Quitman. While Quitman did not receive any State Foundation Aid, the district did qualify for \$76,495 in 98% URT Adjustment funding in 2016-17.

**THE MATRIX**

Arkansas uses a specific formula, known as the **matrix**, to arrive at the per-student funding amount. The matrix calculates the per-student funding based on the cost of personnel and other resources needed to operate a prototypical school of 500 students. Legislators involved in the biennial Adequacy Study determine the dollar amount needed to fund each line item of the matrix, based on the money needed to adequately fund school districts’ educational needs. Unlike the foundation funding rate (\$6,646 for 2016-17), the matrix is not established in statute. Instead, it is used as a tool to set the foundation funding rate. The matrix is divided into two basic sections: 1.) the number of people needed for the prototypical school of 500 students, and 2.) the cost of all needed resources. The first section describes the 35.69 school-level personnel needed for the prototypical school.

	<b>Matrix Item</b>	<b>2016 FTE</b>
<b>Classroom Teachers</b>	Kindergarten	2.00
	Grades 1-3	5.00
	Grades 4-12	13.80
	Non-Core	4.14
	<b>Subtotal</b>	<b>24.94</b>
<b>Pupil Support Staff</b>	Special Education	2.90
	Instructional Facilitators	2.50
	Library Media Specialist	0.85
	Counselors & Nurses	2.50
	<b>Subtotal</b>	<b>8.75</b>
<b>Administration</b>	Principal	1.00
	Secretary	1.00
	<b>Total</b>	<b>35.69</b>

The second section of the matrix specifies the cost of the staff described in the first section of the matrix, as well as the cost of all other needed resources. The matrix is divided into three cost categories:<sup>2</sup>

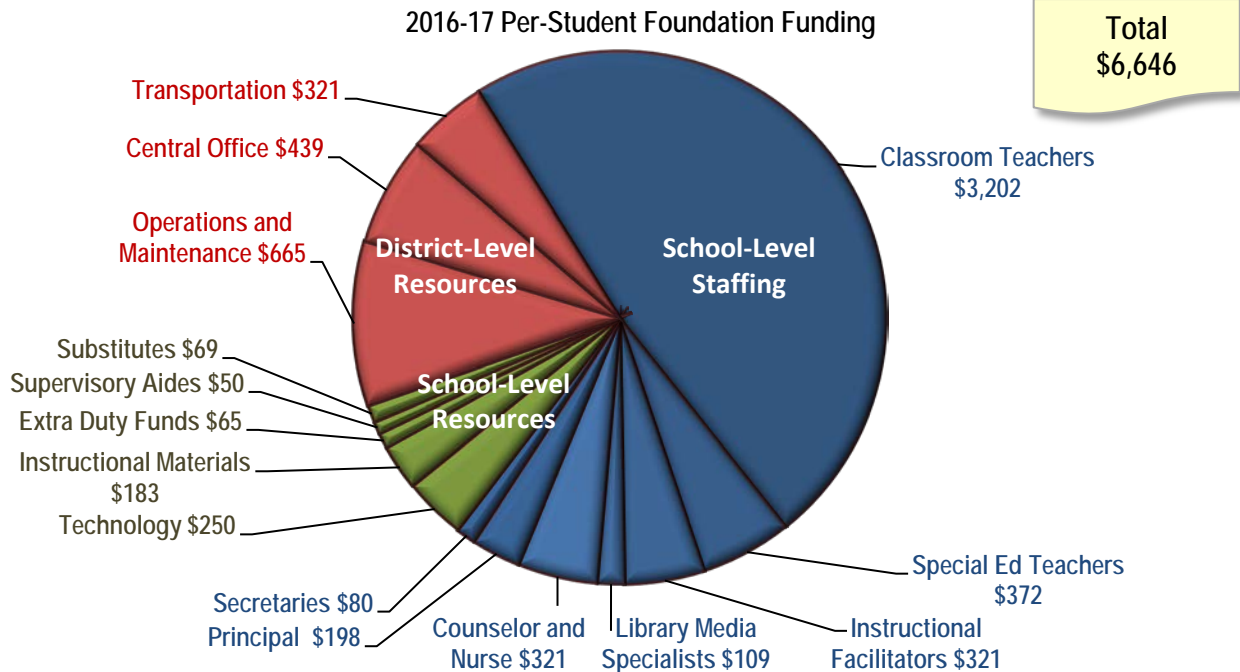
- School-level salaries** of teachers and other pupil support staff, a principal and a secretary. The matrix also identifies the salaries for the school-level staff and calculates the per-student cost of paying the identified salaries for the number of staff needed. For example, 24.94 classroom teachers at \$64,196 each costs a total of \$1,601,048. For a school of 500 students, that calculates to \$3,202.10 per student.
- School-level resources** including instructional materials and technology-related expenses.
- District-level resources**, which include funding for districts’ operations & maintenance, central office and transportation expenses.

<b>School-Level Staffing</b>	<b>Salary &amp; Benefits</b>	<b>Per-Student Funding Amt.</b>
Classroom Teachers	\$64,196	\$3,202.10
Pupil Support Staff	\$64,196	\$1,123.43
Principal	\$99,012	\$198.10
Secretary	\$40,031	80.10

<b>School-Level Resources</b>	<b>Per-Student Funding Amt.</b>
Technology	\$250.00
Instructional Materials	\$183.10
Extra Duty Funds	\$64.90
Supervisory Aides	\$50.00
Substitutes	\$69.00

<b>District-Level Resources</b>	<b>Per-Student Funding Amt.</b>
Operations & Maintenance	\$664.90
Central Office	\$438.80
Transportation	\$321.20

<sup>2</sup> The individual per-student funding amounts total \$6,645.63, which was rounded up to \$6,646 per student for the total foundation funding rate.



**LEGISLATIVE HISTORY**

The General Assembly's efforts to define and fund an adequate education was driven by a lawsuit filed in August 1992 by the Lake View School District in Phillips County. The lawsuit claimed the disparity between public school funding for wealthy districts and for low-income districts was unconstitutional.

In 2002, the Arkansas Supreme Court declared the state's public school funding system inequitable and inadequate and thus unconstitutional. The court ordered the state to define educational adequacy, examine the entire spectrum of the state's public education system, and monitor how state education funding is spent.

To comply with the court's ruling, the General Assembly created the Joint Committee on Educational Adequacy during the 2003 regular legislative session, and charged it with conducting an adequacy study. The committee hired school funding experts Lawrence O. Picus and Associates, who spent four months reviewing Arkansas's school finance and adequacy issues and presented their final recommendations September 1, 2003,<sup>3</sup> which included a foundation funding formula based on the staffing and resources necessary to operate a prototypical school of 500 students.

Based on the recommendations and other information, the General Assembly enacted 73 education bills into law during the Second Extraordinary Session of 2003. The legislation included new funding for school operations, based on a formula known as the matrix. The Supreme Court released the state from court supervision in 2004, praising much of the General Assembly's work while noting that deficiencies still existed.

A year later, after the 2005 legislative session, the Supreme Court reopened the Lake View case at the request of 50 school districts. The districts, led by the Rogers School District, argued that

<sup>3</sup> Odden, A., Picus, L. O., Fermanich (2003). *An Evidence-based Approach to School Finance Adequacy in Arkansas*. Report prepared for the Arkansas Joint Committee on Education Adequacy, [http://www.arkleg.state.ar.us/education/K12/AdequacyReportYears/2003%20Final%20Arkansas%20Report%2009\\_01\\_2003.pdf](http://www.arkleg.state.ar.us/education/K12/AdequacyReportYears/2003%20Final%20Arkansas%20Report%2009_01_2003.pdf)

despite inflation and new state mandates placed on schools, the General Assembly failed to increase the foundation funding rate for 2005-06. They claimed the money schools received was not enough to provide an adequate education.

In December 2005, the Arkansas Supreme Court again declared the public school funding to be unconstitutionally inequitable and inadequate. Among other findings, the court said the state had failed to comply with two laws: its doomsday provision requiring that education needs be funded first and Act 57 of the Second Extraordinary Session of 2003, which required the state to study the cost of providing an adequate education.

In 2006, the Adequacy Study Oversight Subcommittee began another interim study on education and rehired Lawrence O. Picus and Associates to reassess the foundation funding levels. Based on the consultants’ recommendations and other information, the Subcommittee refined the funding levels established in the matrix, and in a special session in April 2006, the General Assembly increased the foundation funding rate.<sup>4</sup>

A year later in May 2007, the Supreme Court, in an historic decision signed by all seven of the participating justices, declared the Arkansas public school funding system constitutional.<sup>5</sup>

Since that time, the House and Senate Education Committees have undertaken biennial studies of the state’s entire education system and adjusted the matrix and foundation funding levels as needed.

**SCHOOL-LEVEL STAFFING**

The first component of the matrix is school-level staffing. This component is made up of 24.94 full-time classroom teachers and another 8.725 pupil support staff. This matrix component also includes one principal and one school-level secretary, for a total of 35.69 school-level full-time employees (FTEs). Funding for the total school-level personnel group (\$4,603.80 in 2016-17) constitutes 69% of the per-pupil funding contained in the matrix. The school-level staffing can be broken down into three categories: classroom teachers, pupil support staff and administration.

Unlike other parts of the matrix, the school-level staffing section is made up of more than a per-student funding amount. For school-level staffing, the matrix contains the number of each type of staff and the salary and benefits for each of those employees. Each line of the matrix is calculated as follows:

	<b>Number of Staff in a Prototypical School of 500 Students</b>		<b>Salary and Benefits for Each Funded Position</b>		<b>Number of Students in Prototypical School</b>		<b>Per- Student Amount</b>
Classroom Teachers	24.94	X	\$64,196	/	500	=	\$3,202.10

In 2016-17, the per-student funding amount was calculated using a salary of \$64,196 for the teachers and other pupil support staff (guidance counselor, librarian, instructional facilitators, nurses, etc.). The principal funding amount was calculated using a salary of \$99,012, and the school secretary funding amount used a salary of \$40,031.

<sup>4</sup> Odden, A., Picus, L. O., & Goetz, M. (2006). Recalibrating *the Arkansas School Funding Structure*. Report prepared for Arkansas Joint Committee on Education, <http://www.arkleg.state.ar.us/education/K12/AdequacyReports/2006/AR%20Recalibration%20Report%20August%2030,%202006.pdf>

<sup>5</sup> *Lake View Sch. Dist. No. 25 of Phillips County v. Huckabee*, 370 Ark. 139, \_\_\_ S.W.3d \_\_\_ (2007).

**CLASSROOM TEACHERS**

The first section of the school-level staffing is classroom teachers. About 70% of the total 35.69 FTE school-level personnel funded in the matrix are classroom teachers who have direct daily interaction with students.

**BACKGROUND: CLASSROOM TEACHERS IN THE MATRIX**

In 2016-17, the matrix provided districts and charter schools with \$3,202.10 per student to support 24.94 classroom teachers. This staffing level was originally based on the average class sizes established in the Accreditation Standards and the recommendations of the state’s education consultants.

In 2003, Picus and Associates recommended developing the matrix based on class sizes of 15 students per class for grades K-3, or an average of 18 students per class for grades K-5. They also recommended a matrix that supported class sizes of 25 students for middle and high school classes. The Arkansas Joint Legislative Committee on Educational Adequacy, however, opted to base the matrix on the state’s existing class size standards (ADE’s Rules Governing Standards for Accreditation of Arkansas Public Schools and School Districts). The state Accreditation Standards provide two types of class size restrictions, a maximum and an average. The **maximum** standard sets the highest number of students any single class can have. The district **average** requires each district to maintain staffing levels that meet an overall average pupil-to-teacher ratio across the entire school district.

The matrix was designed to fund the number of teachers needed to meet the district average class sizes. For example, the accreditation standards allow teachers in grades 1 through 3 to teach up to 23 students. Therefore, the 500-student prototypical school’s 115 students in grades 1 through 3 would require 5 teachers to meet the 23:1 district average. ADE is currently in the process of revising the state accreditation standards, and the draft standards eliminate the district averages.

In 2016-17, seven schools from two districts were placed on probation for exceeding the class size maximums.

Class Size and Grade Distribution Assumptions				
Grade Level	Pupil/Teacher Ratio Standards		Matrix Assumptions	
	District Avg. in Standards*	Class Max. in Standards	# Students	%
Kindergarten	20:1	20:1	40	8%
Grades 1-3	23:1	25:1	115	23%
Grades 4-6	25:1	28:1	345	69%
Grades 7-12	25:1**	30:1		
<b>Total K-12</b>			<b>500</b>	<b>100%</b>

\*The Accreditation Standards require each district to maintain staffing levels that meet an **average** pupil-to-teacher ratio across the entire school district. The **maximum** standard sets the highest ratio any single class can have.

\*\*Teachers for grades 5 through 12 may not be assigned more than 150 students (without receiving additional compensation), which averages 25 students per class for teachers teaching six periods per day.

The matrix provides funding for 24.94 classroom teachers per 500 students. Classroom teachers are divided into two categories in the matrix: core teachers and non-core teachers.

**Core teachers** include teachers whose main responsibility in lower grades is to serve as the primary classroom teacher. In higher grades, core teachers teach in one or more of four academic areas: language arts, math, science, and social studies.

Matrix Item		Type	Average Class Size	# of Students in Matrix	FTE Teachers in Matrix
Classroom Teachers	Core	Kindergarten	20	40	2.0
		Grades 1-3	23	115	5.0
		Grades 4-12	25	345	13.8

The second group, referred to in this report as **non-core teachers**, includes educators who teach physical education, art, or music (PAM), or other electives. These teachers have also been called "specialist teachers."

The 2003 and 2006 Picus and Associates studies recommended that the state calculate the number of non-core teachers needed at 20% of the total core academic teachers. The consultants reasoned that core teachers need one period per day for collaborative planning and professional development, which they could receive when students are in elective classes. Arkansas state law requires districts to allow each teacher at least 200 minutes per week to schedule time for conferences and instructional planning. The planning time must occur in increments of no less than 40 minutes during the instructional day (§ 6-17-114).

The 20% calculation was based on a regular five-hour teacher instructional day at the elementary level and a five-period day at the high school level. Twenty percent of 20.8 core teachers is 4.16 (4.14 is the number in the matrix as a result of rounding adjustments) non-core teachers per 500 students.

Matrix Item		Type	FTE Teachers in Matrix
Classroom Teachers	Core	English Language Arts, Math, Social Studies and Science	20.8
	Non-Core	Physical Education, Art, Music and other electives	4.14, or 20% of Core

**ACTUAL STAFFING PATTERNS**

The APSCN data system does not make feasible analysis of classroom teacher full-time employees (FTEs) by the type of courses they teach. Therefore, the data in this report include both core and non-core teachers. The average number of districts’ classroom teachers paid using foundation funds is just slightly lower than the staffing level established in the matrix. The following table compares the number of classroom teachers in the matrix with the average number of classroom FTEs paid from foundation funds.

Classroom Teachers			
	Matrix FTE Number Per 500	Districts: Foundation Paid Staff Per 500	Charters: Foundation Paid Staff Per 500
<b>2013-14</b>	24.94	24.71	28.60
<b>2014-15</b>	24.94	24.79	27.05
<b>2015-16</b>	24.94	24.63	26.86
<b>2016-17</b>	24.94	24.74	27.59

Charter schools have historically employed more teachers per 500 students using foundation funding than traditional school districts.

Large districts use foundation funding to employ about 5.2 fewer teachers per 500 students than small districts. This may result from larger districts’ ability to gain greater efficiencies with more students. There were fewer differences among the numbers of teachers employed by districts of differing levels of poverty.

High-poverty districts had about 1.3 fewer foundation-funded classroom teachers than the districts with the lowest poverty level. However, when examining the number of teachers employed using all funding sources, high poverty districts employed more teachers per 500 students than districts with lower poverty levels, suggesting that these districts may be using other funding sources, such as NSL state categorical and federal Title I funds, to boost the number of teachers serving their students.

By District Size		
Districts	2016-17 Foundation Paid Teachers Per 500	2016-17 Total Classroom Teachers Per 500
Small (750 or Less)	28.11	35.24
Medium (751-5,000)	25.48	29.22
Large (5,001+)	22.91	28.09

By Poverty Level		
Districts	2016-17 Foundation Paid Teachers Per 500	2016-17 Total Classroom Teachers Per 500
Low Poverty (>70%)	24.62	28.24
Medium Poverty (70%-<90%)	24.96	30.68
High Poverty (90%+)	23.28	34.32

**BACKGROUND: TEACHER SALARIES IN THE MATRIX**

During the Lake View lawsuit, the courts cited Arkansas’s comparatively low teacher salaries and wide wage disparities among districts in the state. In 2003, the Arkansas General Assembly addressed these concerns by passing new taxes to generate additional funding for a variety of educational reforms, including a raise for teachers. Act 59 of the Second Extraordinary Session of 2003 raised the statutory minimum salary nearly 26% and increased the other steps of the salary schedule by 20-25%. For 2004-05, the average salary used in the matrix formula was set at \$48,750 (base salary of \$39,000), and each subsequent year, a cost-of-living adjustment has been applied.

In their final report of the 2016 Adequacy Study, the Education Committees recommended increasing the statutory minimum teacher salary and increasing the per-student foundation funding rate for classroom teachers by 1.25% each year for FY18 and FY19. The General Assembly then passed Act 246 of 2017 to increase the minimum teacher salary from \$31,000 to \$31,400 in 2017-18 and \$31,800 in 2018-19. Act 743 of 2015 increased the per-student foundation funding rate to include the following amounts for classroom teachers:

	2018	2019
Per-Student Rate	\$3,242.11	\$3,282.68
% Change	1.25%	1.25%

**COMPONENTS OF THE TEACHER SALARY IN THE MATRIX**

For school-level staff, the matrix specifies not only the numbers of needed employees, but how much those employees typically cost. The 2016-17 matrix used a base salary for teachers of \$51,093. An additional 22% of that amount is added for fringe benefits [14% for retirement; 8% for Social Security, Medicare, unemployment, and workers’ compensation; and \$1,862 for health insurance (\$154.48 for the first six months and \$155.93 for remaining six months)]. Act 995 of 2015 called for the district contribution for employees participating in the state school employees’ health insurance plan to increase annually “by the same percentage that the legislature increases the per-student foundation funding amount.” On a per-student basis [calculated as  $(\$64,196 \times 24.94) / 500$ ], classroom teacher compensation in the matrix provides about \$3,202.10 per student.

	2016-17
Base Salary in Matrix	\$51,093
Retirement	\$7,153
Social Security, Medicare, Unemployment, Workers’ Compensation	\$4,087
Health Insurance	\$1,862
<b>Total = Salary + Fringe</b>	<b>\$64,196</b>

Act 1446 of 2013 gave the Arkansas Teacher Retirement System (ATRS) the authority to increase the employer contribution percentage to 15%, and in November 2017, the ATRS Board of Trustees voted to increase the percentage beginning in 2019-20. The employer contribution will increase a quarter of a percentage point each year over a four-year period. This increase will diminish the base salary component within the total teacher compensation amount. For example, if the first year of the employer contribution increase had taken effect in 2016-17, the amount available for the base salary for teachers would have been \$50,989, about \$104 less than the actual base salary amount when the employer contribution is just 14%.

	2016-17 Actual contribution	If retirement contribution had been:	
	14%	14.25%	15%
Teacher Salary in Matrix	\$51,093	\$50,989	\$50,678
Retirement	\$7,153	\$7,266	\$7,602
Social Security, Medicare, Unemployment, Workers' Compensation	\$4,087	\$4,079	\$4,054
Health Insurance	\$1,862	\$1,862	\$1,862
<b>Total = Salary + Fringe</b>	<b>\$64,196</b>	<b>\$64,196</b>	<b>\$64,196</b>

While the matrix funded a base salary of \$51,093, districts and charter schools paid classroom teachers an average salary that was about \$3,115 less than the salary provided in the matrix. This average is calculated using expenditures from all funding sources, not just foundation funding.

	Salary in the Matrix	Districts/Charters Actual Average Salary*
Classroom Teacher	\$51,093	\$47,978 <sup>6</sup>

\*Calculated using all funding sources.

## DISTRICT AND CHARTER SCHOOL EXPENDITURES

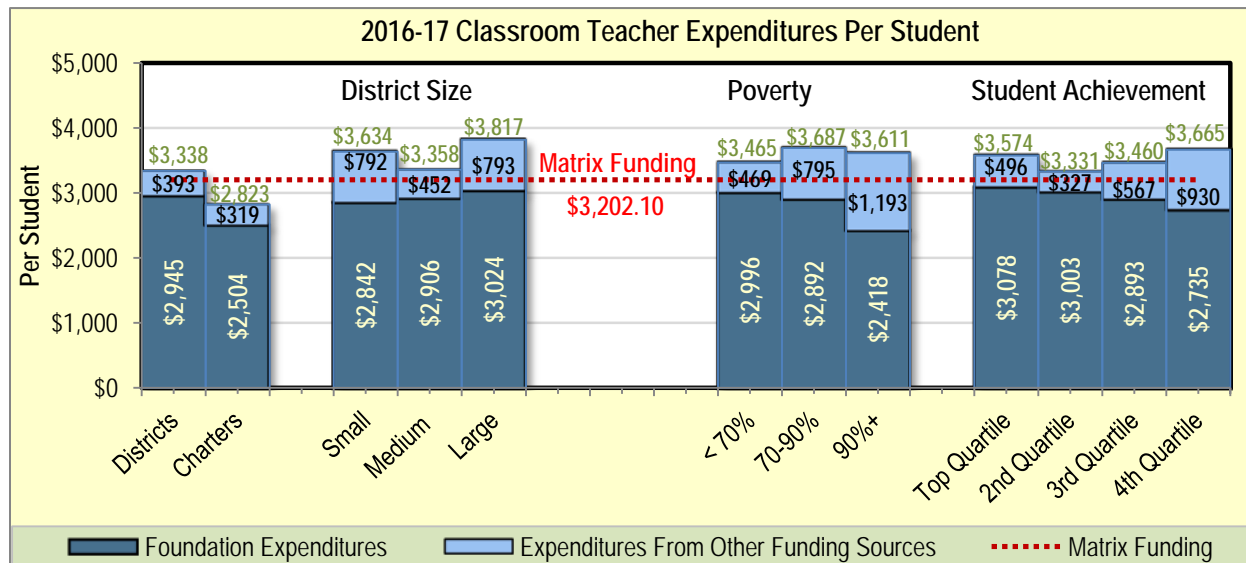
In 2016-17, districts and charter schools collectively spent \$1.38 billion of their foundation funds on classroom teachers. This equates to approximately \$2,933 per student.

Classroom Teachers: Foundation Funding and Expenditures		
	Funding	Expenditures
2015-16	\$1,500,032,846	\$1,371,875,701
2016-17	\$1,513,404,938	\$1,386,360,057

The following chart compares the per-student spending of traditional school districts and charter schools for classroom teachers. It also compares districts' per-student spending based on district size, poverty level and student achievement.

<sup>6</sup> The average teacher salary discussed in an upcoming report on teacher salaries will differ somewhat from the average classroom teacher salary described in this report. That's because the salary calculated for this section of this Resource Allocation report focuses on the average salary of classroom teachers only, while the average teacher salary described in the upcoming report will include the salaries of other types of teachers, such as special education teachers, librarians and guidance counselors.





Traditional school districts spent about \$2,945 per student for classroom teachers using foundation funds, or about \$257 less than the foundation funding rate. Open-enrollment charter schools spent \$2,504 per student, or nearly \$700 less than the matrix amount. When examining spending from all funding sources, charter schools spent about \$500 per student less for classroom teachers than districts spent, a difference that primarily resulted from lower salaries paid by charter schools. Districts employed about one fewer teacher per 500 students than charter schools employed (using all funding sources), but charter schools paid far lower salaries. The average classroom teacher salary among districts was \$48,266, which was more than \$10,000 higher than the average salary charter schools paid. All of the open-enrollment charter schools operating in 2016-17 had been granted waivers from the statute setting the minimum teacher salary schedule. As a result, these charter schools were not required to pay the minimum salary of \$31,000.

	Total Classroom Teachers Per 500 Students (all funding sources)	Average Salary
Districts	29.32	\$48,266
Charters	30.40	\$37,918

Large districts spent more per student on classroom teachers than small districts. While large districts employed fewer teachers per student than smaller districts, they actually spent considerably more per student on those teachers. This reflects the higher salaries that larger districts tend to pay.

	Total Classroom Teachers Per 500 Students (all funding sources)	Average Salary
Small	35.24	\$40,960
Medium	29.22	\$45,770
Large	28.09	\$54,014

High-poverty districts spent less foundation funding per student than lower poverty districts on classroom teachers, but a more equivalent amount from all funding sources. This reflects the other types of funding that high-poverty districts have to spend on teachers' salaries, including NSL state categorical funding. In fact, in overall spending (foundation and other types of funds), the high-poverty districts actually outspent the low-poverty districts, primarily due to employing more teachers per 500 students.

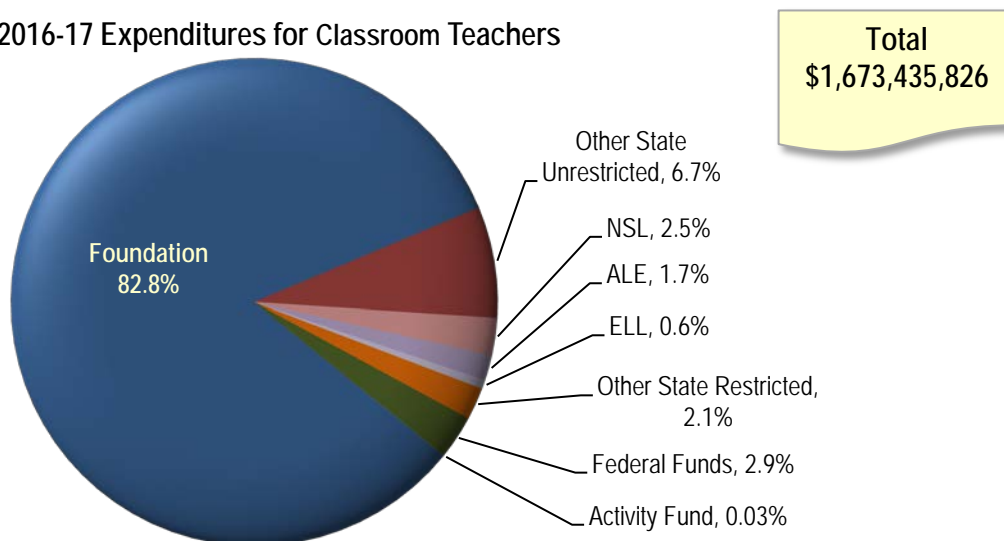
	Total Classroom Teachers Per 500 Students (all funding sources)	Average Salary
Low Poverty	28.24	\$48,893
Medium Poverty	30.68	\$47,752
High Poverty	34.32	\$40,971

The pattern of per-student spending based on district student achievement level follows a pattern similar to the spending based on concentrations of poverty. All of the districts in the highest poverty group are also in the lowest achieving group. The lowest achieving districts spent less foundation funding per student on classroom teachers than the highest achieving districts, but the lowest achieving districts spent significantly more per student from other funding sources than the high achieving districts. The lowest achieving districts employed more teachers per student than higher achieving districts, but paid those teachers a lower average salary.

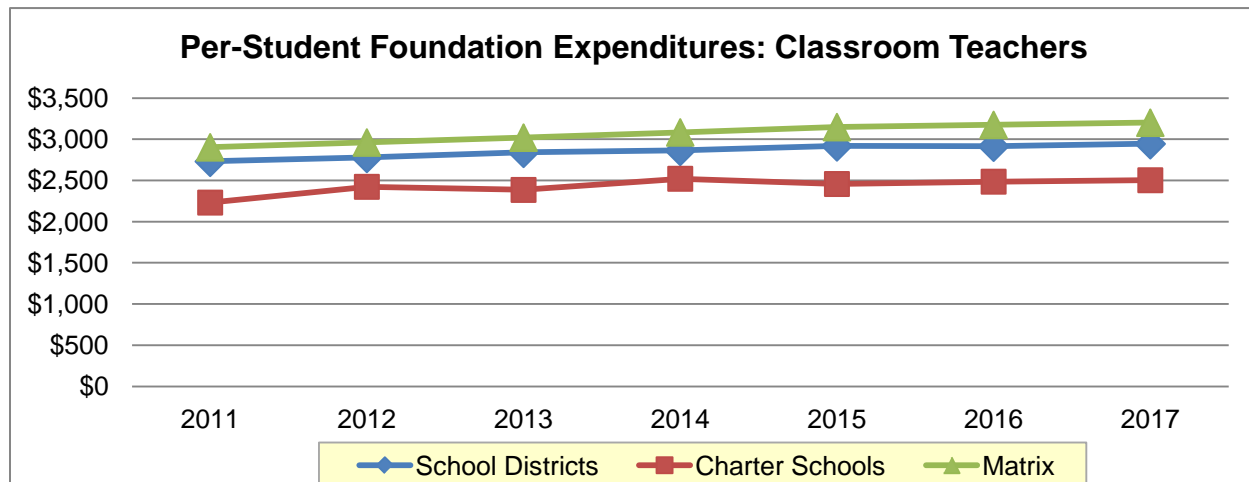
Student Achievement Quartile	Total Classroom Teachers Per 500 Students (all funding sources)	Average Salary
Top	28.01	\$51,002
2 <sup>nd</sup>	28.48	\$48,742
3 <sup>rd</sup>	30.57	\$44,854
4 <sup>th</sup>	31.18	\$46,613

In addition to foundation funding, districts and charter schools receive a variety of other sources of funding they can use for teacher salaries. Districts and charter schools used foundation funding to pay for nearly 83% of the total cost of classroom teacher salaries, but they also used another \$287.1 million in other types of funding to pay for teachers. The chart below shows the district expenditures for classroom teachers by the type of funding used.

2016-17 Expenditures for Classroom Teachers



The following graph shows the per-student expenditures for classroom teachers from foundation funding between 2011 and 2017. Traditional districts and charter schools have consistently spent less foundation funding per student on classroom teachers than they are provided by the matrix. Additionally, the gap between the amount districts received in funding and the amount they spent from foundation funding widened slightly between 2011 and 2017.



**STATE RANKING: STAFFING AND EXPENDITURES**

One measure of the adequacy of Arkansas’s education funding system is its staffing levels compared with those of other states. The following tables use pupil-to-teacher ratios to show how Arkansas’s teacher staffing levels compare with other states’. School year 2015-16 is the most recent year for which national data are available through the National Center for Education Statistics (NCES).

NCES calculates each state’s pupil-to-teacher ratio. This is simply a calculation of the total number of students (including pre-kindergarten students) divided by the total number of teachers, regardless of class assignment. Using this measure, Arkansas ranks 3<sup>rd</sup> among surrounding states and 2<sup>nd</sup> among SREB states, with one teacher for every 13.7 students. Nationally, Arkansas ranks behind just 14 other states and Washington, D.C.

	Pupil/Teacher Ratio
National Average	16.0
Arkansas	13.7

SREB States	Pupil/Teacher Ratio
1. Louisiana	12.3
<b>2. Arkansas</b>	<b>13.7</b>
3. West Virginia	14.1
4. Virginia	14.2
5. Maryland	14.8
6. Delaware	15.0
7. Tennessee	15.1
8. Mississippi	15.1
9. South Carolina	15.2
10. Texas	15.3
11. Florida	15.3
12. Georgia	15.5
13. North Carolina	15.5
14. Oklahoma	16.3
15. Kentucky	16.4
16. Alabama	18.2

Surrounding States	Pupil/Teacher Ratio
1. Louisiana	12.3
2. Missouri	13.6
<b>3. Arkansas</b>	<b>13.7</b>
4. Tennessee	15.1
5. Mississippi	15.1
6. Texas	15.3
7. Oklahoma	16.3

Source: U.S. Department of Education, National Center for Education Statistics, Selected Statistics From the Public Elementary and Secondary Education Universe: School Year 2015-16, Table 2, <https://nces.ed.gov/pubs2018/2018052.pdf>

NCES also provides data on total expenditures for the instructional (regular program) salaries defined by NCES as “certified teachers and certified substitute teachers providing regular education instruction to students in pre-kindergarten through grade 12.” The most recent data available for all states are from 2014-15.<sup>7</sup> According to the NCES data, Arkansas schools spent \$2,390 per student on instructional staff salaries in 2014-15. (The enrollment data used to calculate the per-student instructional staff expenditures include pre-K students who have been excluded from the BLR’s foundation funding analysis.)

Instructional Salaries-Regular Programs Expenditures	
National Average	\$2,840 per student
Arkansas	\$2,390 per student

	Per-Student Expenditures for Instructional Staff Salaries: Arkansas’s Rank
All States and Washington D.C. (50*)	39 <sup>th</sup> highest
SREB States (16)	10 <sup>th</sup> highest
Surrounding States (7, including AR)	4 <sup>th</sup> highest

\*Data were not available for Alaska

## SPECIAL EDUCATION TEACHERS

All districts must provide students with disabilities access to special education services under the federal Individuals with Disabilities Education Act (IDEA). Arkansas Code § 6-41-202 establishes in state statute that it is also the state’s policy to provide a free and appropriate public education to students with disabilities. Every special education student has an individualized education program (IEP). An IEP is a plan or program developed to ensure that a child with a disability identified under the law receives specialized instruction and related services. There were 59,672 special education students (ages 5-12) in Arkansas public schools in 2016-17, making up about 12.5% of the total student enrollment in the state.<sup>8</sup>

Special education teachers are among the staff positions that districts have the most difficult time filling. In 2016-17, 139 schools were cited for having inadequately licensed special education teachers, and two schools were placed on probation for failing to adhere to special education class size limits.

<sup>7</sup> National Center for Education Statistics, Elementary/Secondary Information System, <https://nces.ed.gov/ccd/elsi/>

<sup>8</sup> Calculation made using data retrieved from <https://adedata.arkansas.gov/statewide/Districts/EnrollmentCount.aspx> and the ADE’s special education child count data, ages 6-21.

**BACKGROUND: SPECIAL EDUCATION TEACHERS IN THE MATRIX**

The matrix provides funding for 2.9 special education teachers. These teachers are in addition to the 24.94 classroom teachers provided in the matrix. Like most school-level staff, the cost of each FTE in the special education matrix line is calculated using the teacher salary of \$64,196 for 2016-17 (base salary of \$51,093, plus benefits). For 2.9 special education teachers, the matrix provides \$186,168 for every 500 students or \$372.34 per student.

This staffing level is based on the recommendation of the General Assembly’s consultants in 2003, with an adjustment recommended by a panel of Arkansas educators. Because the specific needs of special education students dictate the level of staffing required, the state could not simply calculate the number of special education teachers needed based on maximum student-to-teacher staffing for special education classes.

The Committee’s consultants, Picus and Associates, originally proposed funding 2.0 special education teachers, but after receiving input from panels of Arkansas educators and ADE officials, the Joint Adequacy Committee opted to increase the number to 2.9 teachers.

Hired again in 2006, Picus and Associates affirmed the state’s methodology of funding special education using a “census” approach, meaning the funding is based on total enrollment rather than on the number of special education students. They affirmed the state’s funding level for 2.9 special education teachers for “high-incidence, lower cost students with disabilities.” Since 2006, the matrix has continued to fund 2.9 special education teachers for every 500 students. The state has also historically supplemented foundation funding with about \$11 million annually in Catastrophic Occurrences funding for low incidence, high-cost students with disabilities.

In their final report of the 2016 Adequacy Study, the Education Committees recommended increasing the per-student foundation funding rate for special education teachers each year by 1.25% for FY18 and FY19, based on the salary increase for teachers in the matrix. For special education teachers in the matrix, Act 743 of 2017 increased the per-student foundation funding rate to include the following amounts:

	2018	2019
Per-Student Rate	\$376.99	\$381.71
% Change	1.25%	1.25%

The Education Committees also recommend an increase in Catastrophic Occurrences funding. The House Education Committee recommended a \$2 million increase in 2017-18 and a \$2,020,000 increase in 2018-19 over the 2016-17 funding level. The Senate Education Committee recommended the same increases, but the Senate Committee specified that the \$2,020,000 in 2018-19 was to be an increase over the 2017-18 funding level. Acts 1044 of 2017 and 243 of 2018 appropriated \$13 million and \$13,020,000 respectively for Special Education Catastrophic funding.

**ACTUAL STAFFING PATTERNS AND SALARIES**

In traditional school districts, the average number of special education teachers paid using foundation funding is just slightly more than the staffing level established in the matrix. Charter schools, on the other hand, employ fewer special education teachers using foundation funding than the matrix provides. The following table compares the matrix number for special education teachers with the average number of FTEs employed by districts and charter schools using foundation funding.

<b>Special Education Teachers</b>			
	<b>Matrix FTE Number Per 500</b>	<b>Districts: Foundation Paid Staff Per 500</b>	<b>Charters: Foundation Paid Staff Per 500</b>
<b>2013-14</b>	2.9	2.94	1.17
<b>2014-15</b>	2.9	2.97	1.43
<b>2015-16</b>	2.9	2.94	1.69
<b>2016-17</b>	2.9	2.98	1.50

There were relatively small differences in the staffing levels of district groups based on size and concentrations of poverty. Large districts and low-poverty districts had the highest special education staffing levels.

<b>By District Size</b>		
	<b>2016-17 Foundation Paid Staff Per 500</b>	<b>2016-17 Total Special Education Teachers Per 500</b>
Small (750 or Less)	2.77	3.84
Medium (751-5,000)	2.98	3.76
Large (5,001+)	3.02	3.99

<b>By Poverty Level</b>		
	<b>2016-17 Foundation Paid Staff Per 500</b>	<b>2016-17 Total Special Education Teachers Per 500</b>
Low Poverty (>70%)	3.09	3.87
Medium Poverty (70%-<90%)	2.83	3.85
High Poverty (90%+)	2.62	3.69

Districts and charter schools collectively paid special education teachers a salary that was, on average, about \$1,800 less than the salary provided in the matrix. This average is calculated using expenditures from all funding sources, not just foundation funding.

	<b>Salary in the Matrix</b>	<b>Districts/Charters Actual Average Salary*</b>
Special Education Teacher	\$51,093	\$49,278

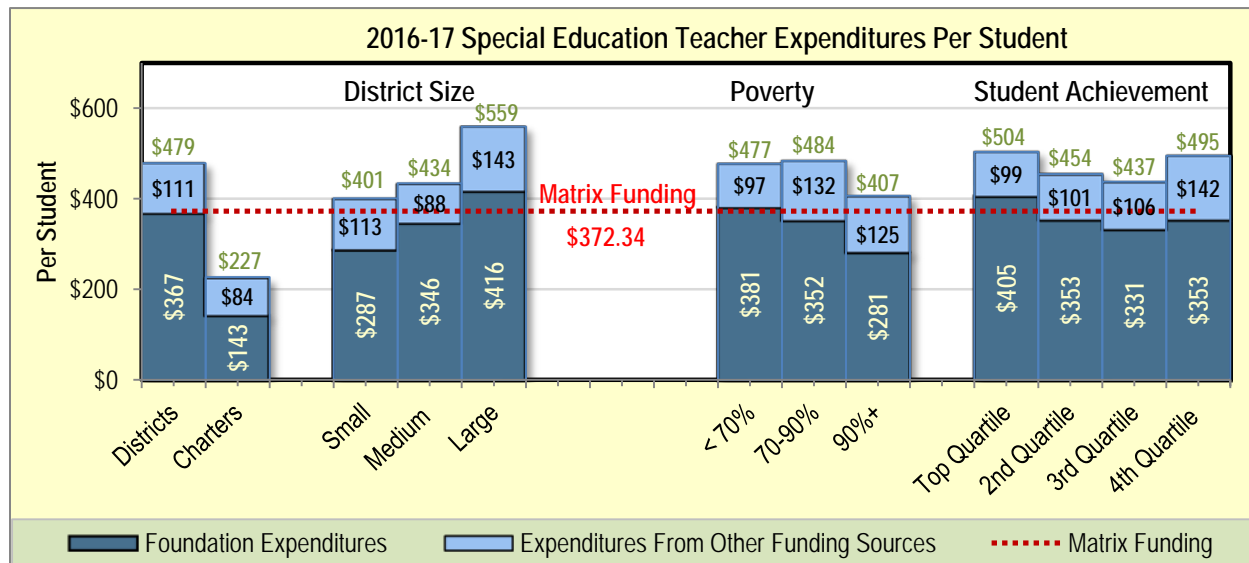
\*Calculated using all funding sources.

## **DISTRICT AND CHARTER SCHOOL EXPENDITURES**

In 2016-17, districts and charter schools statewide spent about \$170.8 million from foundation funding on special education teachers. This equates to about \$361 per student, which is just under the amount funded in the matrix (\$372).

<b>Special Education Teachers: Foundation Funding and Expenditures</b>		
	<b>Funding</b>	<b>Expenditures</b>
<b>2015-16</b>	\$174,420,447	\$168,435,234
<b>2016-17</b>	\$175,977,318	\$170,770,278

The following chart compares the per-student spending of traditional school districts and charter schools for special education teachers. It also compares districts' per-student spending based on district size, poverty level and student achievement.



Open-enrollment charter schools spent considerably less foundation funding per student on special education teachers than traditional school districts, as shown in the following chart. This is true when considering only foundation funding expenditures (\$143 per student compared with districts’ \$367) as well as expenditures from all funding sources (\$227 per student compared with districts’ \$479). This lower level of spending may be due to the fact that charter schools as a group have a smaller percentage of students in special education, about 9% compared with 12.6% in traditional school districts. Additionally, charter schools have fewer special education teachers for the size of their student population (2.42 teachers for every 500 charter school students, compared with 3.86 teachers for every 500 students in traditional districts), and they pay special education teachers lower salaries (about \$36,900, compared with about \$49,500 in school districts).

	Total SPED Teachers Per 500 Students (all funding sources)	Average Salary
Districts	3.86	\$49,493
Charters	2.42	\$36,917

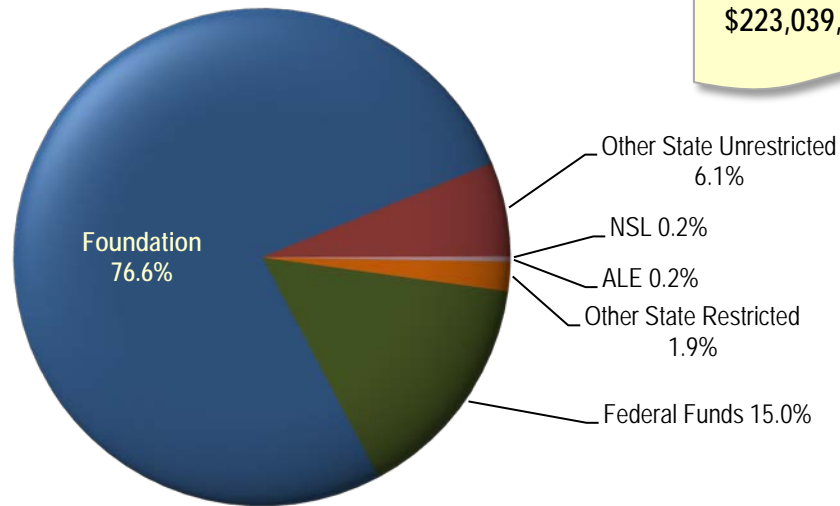
The chart also indicates that larger districts spent more per student than smaller districts, and districts with the highest concentrations of poverty spent less per student than other districts. These patterns result from lower salaries for special education teachers in the smaller districts and in the highest poverty districts. The highest achieving districts and the lowest achieving districts outspent the middle achieving districts in total spending from all funding sources.

	Total SPED Teachers Per 500 Students (all funding sources)	Average Salary
Small	3.84	\$41,695
Medium	3.76	\$46,202
Large	3.99	\$55,552

	Total SPED Teachers Per 500 Students (all funding sources)	Average Salary
Low Poverty	3.87	\$49,172
Medium Poverty	3.85	\$50,163
High Poverty	3.69	\$43,854

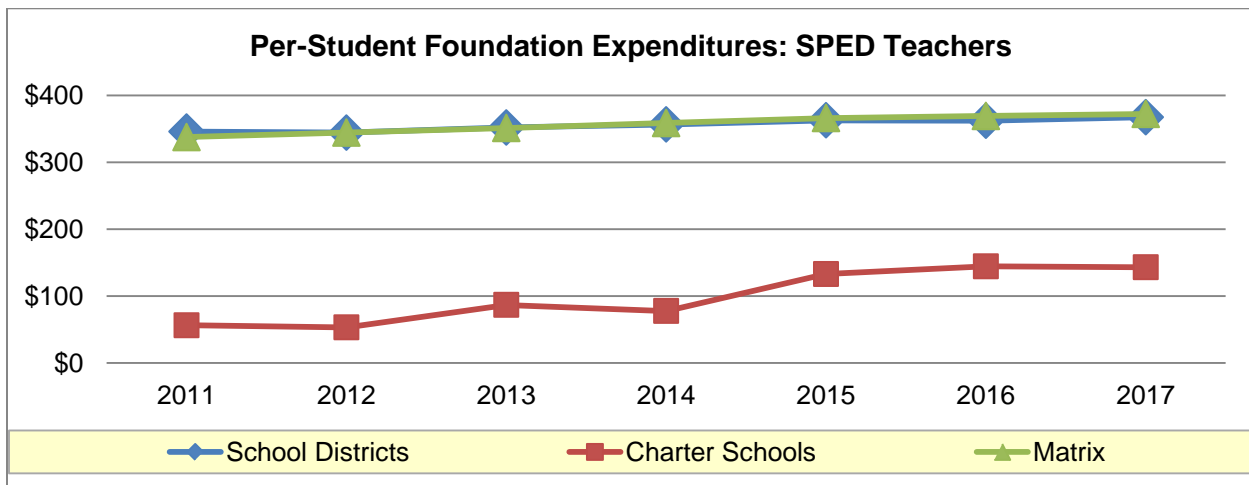
Foundation funding covered about 76.6% of districts’ and charter schools’ total expenditures on special education teachers in 2016-17. Districts and charter schools used other funding, including federal IDEA, Part B funds and state Catastrophic Occurrences funding to pay for special education teachers.

2016-17 Expenditures For Special Education Teachers



**Total**  
\$223,039,839

The following graph shows the per-student expenditures for special education teachers from foundation funding between 2011 and 2017. Traditional districts historically have spent about the same amount per student on special education teachers as the matrix provides. Charter schools have tended to spend well below the per-student funding amount, although charter schools' expenditure per student has increased over the last few years.



**STATE RANKING: EXPENDITURES**

NCES provides data on total special education salaries in each state. The most recent data available for all states are from 2014-15. According to the NCES data, Arkansas schools spent \$387 per student on certified special education teachers and substitutes in 2014-15. (The enrollment data used to calculate the per-student special education expenditures include pre-K students who have been excluded from the BLR's foundation funding analysis.)

Special Education Teacher Expenditures	
National Average	\$661 per student
Arkansas	\$387 per student



	<b>Expenditures for Special Education Instructional Staff Salaries: Arkansas's Rank</b>
All States and Washington D.C. (50*)	39 <sup>th</sup> highest
SREB States (16)	11 <sup>th</sup> highest
Surrounding States (7, including AR)	4 <sup>th</sup> highest

\* Data were not available for Alaska

## INSTRUCTIONAL FACILITATORS

An instructional facilitator is a staff member who helps teachers plan, develop and evaluate instruction. Instructional facilitators may be referred to as “academic coaches,” “specialists” and “curriculum supervisors.” Among their many responsibilities, instructional facilitators perform the following functions:

- Demonstrate lessons in curriculum and teaching techniques for classroom teachers and others.
- Facilitate communication about research-based instructional practices and student achievement between and among teachers, within and across grade levels.
- Assist in the implementation of the school improvement planning process.
- Plan and provide professional development for classroom teachers by conducting formal workshops, group discussions and one-on-one mentoring.
- Assist teachers in analyzing classroom and state assessment data to inform instruction.

## BACKGROUND: INSTRUCTIONAL FACILITATORS IN THE MATRIX

The instructional facilitator line of the matrix funds 2.5 employees for each school of 500 students. Those 2.5 positions allow for a half-time assistant principal (.5 FTE) and a half-time technology assistant (.5 FTE). Like all school-level pupil support staff, the cost of each FTE in the instructional facilitator line is calculated using the teacher salary of \$64,196 for 2016-17 (base salary of \$51,093, plus benefits). For 2.5 instructional facilitators, the matrix provides \$160,460 for every 500 students or \$320.98 per student.

### Instructional Facilitators and Curriculum Supervisors

In 2003, Picus and Associates recommended providing funding for 2.5 instructional facilitators per 500 students. They noted that instructional facilitators “coordinate the instructional program, and provide the important ongoing coaching and mentoring that the professional development literature shows is so critically necessary for teachers to change and improve their instructional practice.” They also noted that “[c]urriculum and instructional adaptation requires the support of a specially trained coach at the building level.”<sup>9</sup>

When the consultants were rehired in 2006, they reiterated their recommendation that Arkansas provide funding to support 2.5 instructional facilitators but noted that a number of school districts were not actually spending foundation funding on instructional facilitators. The consultants recommended pulling the instructional facilitator funding out of the matrix and creating a separate line of categorical funding where districts’ use of the money would be restricted to that purpose.

The General Assembly adopted the consultants’ recommendation to designate funding for 2.5 instructional facilitators, and discussed allowing .5 of an FTE for an assistant principal. The Legislature also opted to leave the instructional facilitator funding in the matrix, rather than breaking it out as a categorical. The instructional facilitator line has included 2.5 FTEs since that time.

<sup>9</sup> Odden, A., Picus, L. O., Fermanich (2003). *An Evidence-based Approach to School Finance Adequacy in Arkansas*. Report prepared for the Arkansas Joint Committee on Education Adequacy, [http://www.arkleg.state.ar.us/education/K12/AdequacyReportYears/2003%20Final%20Arkansas%20Report%2009\\_01\\_20\\_03.pdf](http://www.arkleg.state.ar.us/education/K12/AdequacyReportYears/2003%20Final%20Arkansas%20Report%2009_01_20_03.pdf), p. 23 and 30

In addition to instructional facilitators, Picus and Associates noted in 2003 that the recommended 2.5 employees in the instructional facilitator line could include two other staff positions: a technology assistant and an assistant principal.

### Technology Assistant

The technology assistant's role is to "provide the technological expertise to fix small problems with the computer system, install all software, connect computer equipment so it can be used for both instruction and management issues and provide professional development to embed computer technologies into the curriculum."<sup>10</sup> When the consultants were rehired in 2006, they specified that the staffing level for the technology assistant be calculated at .5 of the total 2.5 instructional facilitator FTEs.

### Assistant Principal

Assistant principals are also addressed in the instructional facilitator line of the matrix because the state accreditation standards treat them as interchangeable with curriculum specialists. Arkansas accreditation standards require districts to employ a half-time (.5 FTE) assistant principal, instructional supervisor or curriculum specialist for schools exceeding 500 students (15.02). About 34% of schools had more than 500 students in 2016-17, so this accreditation standard would not apply to nearly 700 of the state's 1,045 schools. Four schools were cited in 2016-17 for employing assistant principals who were inadequately licensed.

In 2003, the consultants hired by the General Assembly discouraged Arkansas from including assistant principals within the matrix. "[F]ew if any comprehensive school designs include assistant principal positions," they wrote.<sup>11</sup> In passing Act 59 of the Second Extraordinary Session of 2003, the General Assembly adopted the consultants' recommendation and funded a total of 2.5 employees in the instructional facilitators line of the matrix.

Hired again in 2014, the consultants changed their position on assistant principals and recommended adding funding for an assistant principal in the principal line of the matrix. They recommended adding 1 assistant principal for every 600 high school students, "largely for discipline and athletics."<sup>12</sup> This would equate to 0.26 FTEs for the prototypical district. However, the Education Committees did not recommend this change in their final 2014 Adequacy Report.

In their 2016 Adequacy Report, the Education Committees did recommend increasing the per-student foundation funding rate for instructional facilitators by 1.25% for FY18 and FY19, based on the salary increase for teachers in the matrix. Act 743 of 2017 increased the per-student foundation funding rate to include the following amounts for instructional facilitators, assistant principals and technology assistants:

	2018	2019
Per-Student Rate	\$325.00	\$329.07
% Change	1.25%	1.25%

<sup>10</sup> Odden, A., Picus, L. O., Fermanich (2003). *An Evidence-based Approach to School Finance Adequacy in Arkansas*. Report prepared for the Arkansas Joint Committee on Education Adequacy, [http://www.arkleg.state.ar.us/education/K12/AdequacyReportYears/2003%20Final%20Arkansas%20Report%2009\\_01\\_2003.pdf](http://www.arkleg.state.ar.us/education/K12/AdequacyReportYears/2003%20Final%20Arkansas%20Report%2009_01_2003.pdf), p. 23.

<sup>11</sup> Odden, A., Picus, L. O., Fermanich (2003), p. 22.

<sup>12</sup> Picus Odden & Associates, Desk Audit of the Arkansas School Funding Matrix and Developing an Understanding of the Potential Costs of Broadband Access for All Schools, September 5, 2014, p. 42.

**ACTUAL STAFFING PATTERNS**

The staffing level established in the matrix for instructional facilitators, curriculum supervisors, assistant principals and technology assistants is more than twice the actual average number of employees that districts employ using their foundation funding. The following table compares the matrix number for instructional facilitators and assistant principals with the average number of FTEs employed by districts and charter schools. The number of FTEs districts employed using foundation funds does not include any technology assistants because APSCN lacks an employee code for that position. Therefore, districts' staffing levels for the instructional line of the matrix represented in the following table are lower than they actually are. However *expenditures* for technology assistants are included in the financial numbers provided later in this report.

<b>Instructional Facilitators and Assistant Principals</b>			
	<b>Matrix FTE Number Per 500</b>	<b>Districts: Foundation Paid Staff Per 500</b>	<b>Charters: Foundation Paid Staff Per 500</b>
<b>2013-14</b>	2.5	0.98	1.32
<b>2014-15</b>	2.5	1.02	2.10
<b>2015-16</b>	2.5	1.05	1.69
<b>2016-17</b>	2.5	1.10	1.46

As shown in the following table, large districts tend to employ more of these staff than smaller districts, which may result from having larger schools that use more assistant principals.

High-poverty districts employ about the same number of these staff using foundation dollars than lower poverty districts. However, when all funding sources are considered, high poverty districts employed 1.8 and 2.4 times as many instructional facilitators/assistant principals for every 500 students when compared with the districts in the lower two poverty categories. This indicates that high-poverty districts relied on non-foundation funding to hire most of these employees.

<b>By District Size</b>		
<b>Districts</b>	<b>2016-17 Foundation Paid Staff Per 500</b>	<b>2016-17 Total Staff Per 500</b>
Small (750 or Less)	0.40	2.35
Medium (751-5,000)	1.02	2.32
Large (5,001+)	1.36	3.19

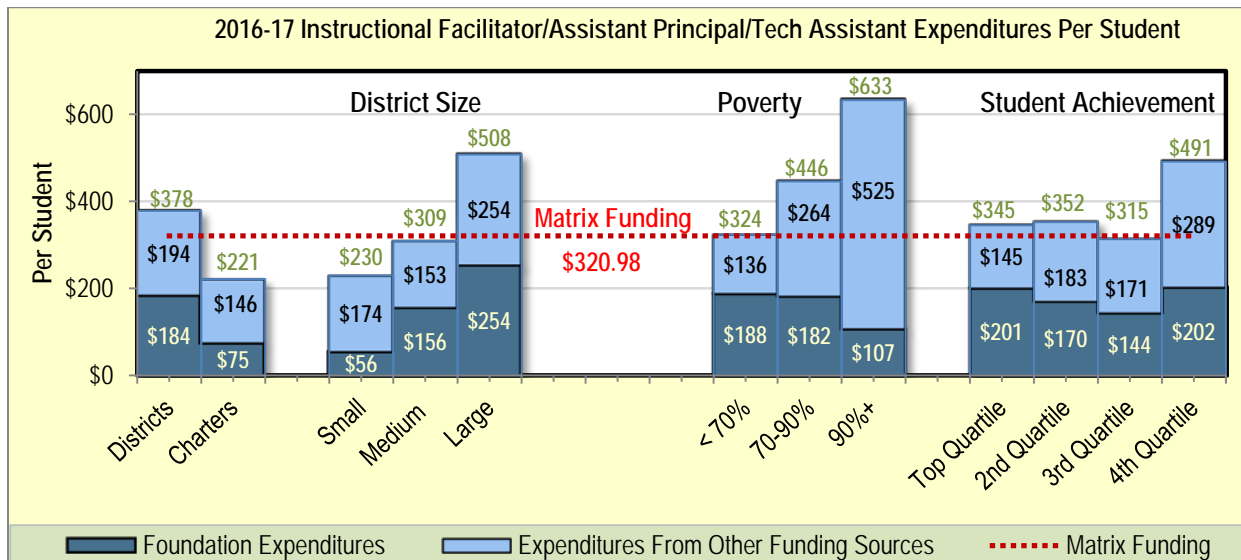
<b>By Poverty Level</b>		
<b>Districts</b>	<b>2016-17 Foundation Paid Staff Per 500</b>	<b>2016-17 Total Staff Per 500</b>
Low Poverty (>70%)	1.13	2.31
Medium Poverty (70%-<90%)	1.04	3.04
High Poverty (90%+)	1.11	5.53

**DISTRICT AND CHARTER SCHOOL EXPENDITURES**

In 2016-17, districts and charter schools statewide spent nearly \$85.7 million from foundation funding on instructional facilitators, assistant principals and technology assistants, about 56% of the amount provided for this purpose. This equates to about \$181 per student.

<b>Instructional Facilitators: Foundation Funding and Expenditures</b>		
	<b>Funding</b>	<b>Expenditures</b>
<b>2015-16</b>	\$150,367,015	\$83,308,794
<b>2016-17</b>	\$151,704,585	\$85,696,000

The following chart compares the per-student spending of traditional school districts and charter schools for instructional facilitators/assistant principals. It also compares districts' per-student spending based on district size, poverty level and student achievement.



Districts spent nearly \$20 per student from foundation funding on instructional facilitators and curriculum supervisors and \$29 per student on technology assistants. The fact that districts spent considerably less in this line than the matrix provides results from districts' access to other types of funding they can use for instructional facilitators. Districts employed more instructional facilitators and assistant principals per 500 students than charter schools, and they paid higher salaries to those staff.

	Curriculum Supervisors and Instructional Facilitators		Assistant Principals and Deans of Students	
	Total Staff Per 500 Students (all funding sources)	Average Salary	Total Staff Per 500 Students (all funding sources)	Average Salary
Districts	1.83	\$61,477	0.82	\$74,028
Charters	1.42	\$55,141	0.49	\$63,887

Of the \$181 per student that districts spent from foundation funding, about \$134 of it (74%) was spent on assistant principals and deans of students. Collectively, districts spent more than twice as much foundation funding on assistant principals and deans of students as what was provided in the matrix. This is likely due to the fact that, although many districts do not have any assistant principals or deans of students (89 of the 235 districts and 19 of the 24 charter schools in 2016-17), those that do, pay them considerably higher salaries than what was funded through the matrix.

	Salary in the Matrix	District/Charter Actual Average Salary*
Assistant Principals and Deans of Students	\$51,093	\$73,865
Curriculum Supervisors and Instructional Facilitators	\$51,093	\$61,344

\*Calculated using all funding sources.

Large districts spent considerably more foundation funding per student on the instructional facilitator/assistant principal line than small districts, primarily due to the fact that they employ more assistant principals than the small districts and they pay higher salaries than small districts. In 2016-17, large districts spent \$182 per student from foundation funding for assistant principals, compared with small districts' \$12 per student.

	Curriculum Supervisors and Instructional Facilitators		Assistant Principals and Deans of Students	
	Total Staff Per 500 Students (all funding sources)	Average Salary	Total Staff Per 500 Students (all funding sources)	Average Salary
Small	2.16	\$41,597	0.19	\$58,686
Medium	1.57	\$58,758	0.75	\$68,367
Large	2.11	\$69,047	1.07	\$80,147

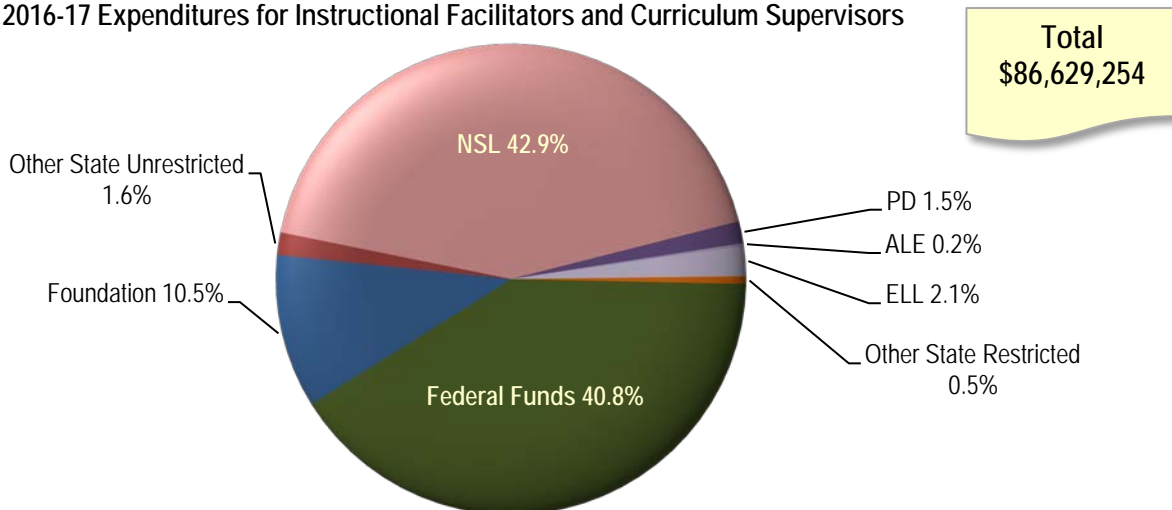
High-poverty districts spent less foundation funding on the instructional facilitator line than wealthier districts, but they spent considerably more on these staff when considering total expenditures from all funding sources. These higher overall expenditures result from the fact that high-poverty districts have more curriculum supervisors and instructional facilitators per 500 students than the other districts. They employ more than twice as many of these staff per 500 students when compared with middle poverty districts and more than three times as many of these staff as the lowest poverty districts.

	Curriculum Supervisors and Instructional Facilitators		Assistant Principals and Deans of Students	
	Total Staff Per 500 Students (all funding sources)	Average Salary	Total Staff Per 500 Students (all funding sources)	Average Salary
Low	1.47	\$59,978	0.84	\$73,963
Medium	2.24	\$63,314	0.80	\$74,649
High	4.75	\$56,224	0.79	\$60,085

In addition to foundation funding, districts and charter schools receive a variety of other sources of funding they can use for instructional facilitators, assistant principals and technology assistants.

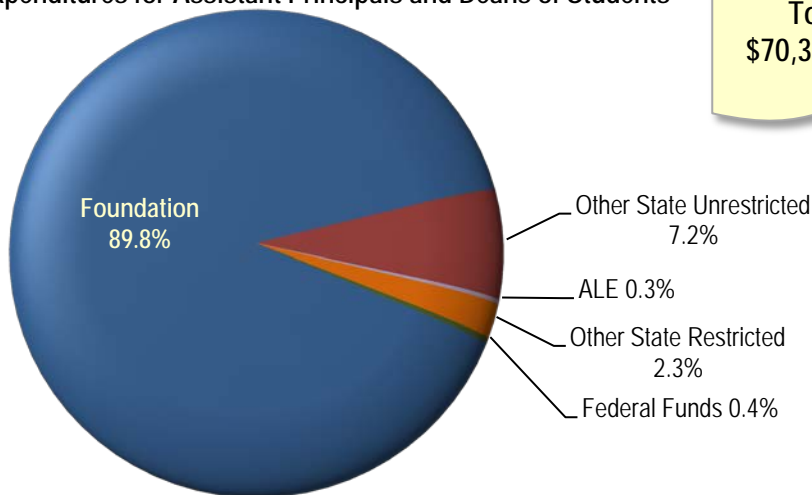
The following pie charts show the proportion of each funding type used to cover all expenditures for instructional facilitators, assistant principals and technology assistants. Districts and charter schools use foundation funding to cover a little more than 10% of their total expenditures for instructional facilitators and curriculum supervisors. Districts primarily use NSL state categorical funds and federal funds to pay for these staff.

2016-17 Expenditures for Instructional Facilitators and Curriculum Supervisors



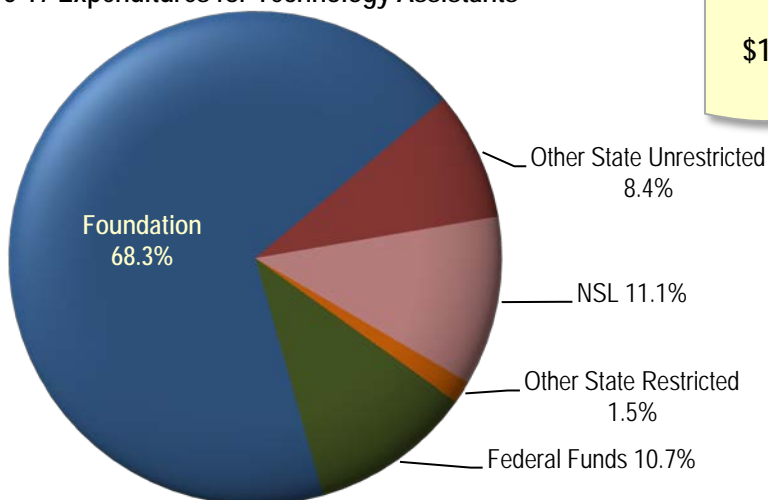
Districts do, however, use foundation funds to cover the majority of their expenditures for assistant principals and technology assistants. Foundation funds cover nearly 90% of assistant principal expenditures and 68% of their expenditures for technology assistants, as shown in the following charts.

2016-17 Expenditures for Assistant Principals and Deans of Students



**Total**  
**\$70,381,062**

2016-17 Expenditures for Technology Assistants

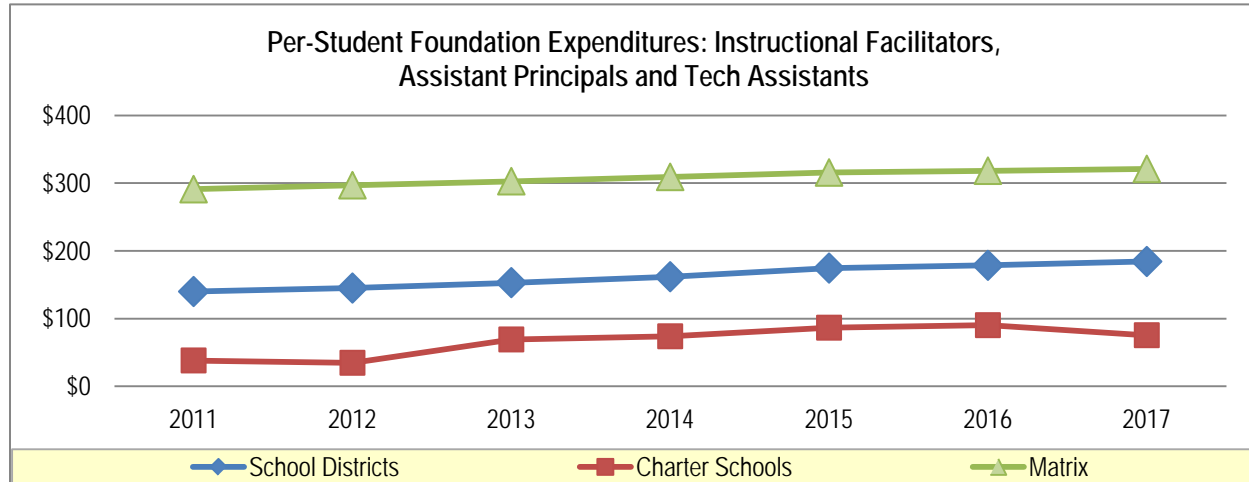


**Total**  
**\$19,609,354**

Districts and one open enrollment charter school spent about \$19.6 million on technology assistants. In a BLR survey question asking superintendents, principals and teachers to rank the barriers to the use of technology in the classroom, the second most frequently cited barrier by all three groups was an inadequate number of technology support staff. (The highest ranking barrier was inadequate technology in students’ homes.) (These survey results will be discussed in more detail in the final Resource Allocation report on school-level resources.)

A review of districts’ expenditures shows that 97 traditional districts (41%) and 23 of the 24 charter schools reported no technology assistant expenditures. However, of those 120 districts and charter schools with no technology assistant expenditures, 92 did have expenditures for technology staff who provided district administrative technology services. Still, 19 of the 24 charter schools had no expenditures for either type of technology staff. (For the Resource Allocation analysis, district administrative technology staff expenditures were included as part of the central office expenditures described in a previous report examining district-level resources.) On average, districts and charters spent about \$41.50 per student on technology assistants from all funding sources and \$54.33 per student on district administrative technology staff.

The following graph shows the per-student foundation funding expenditures for instructional facilitators, assistant principals and technology assistants between 2011 and 2017. Both districts and charter schools typically spend far less foundation funding on these staff than they receive through the matrix. However the lower spending levels reflect the fact that districts and charters have other types of funding they can use for this purpose.



**STATE RANKING: STAFFING AND EXPENDITURES**

NCES provides data on the number of “instructional coordinators” in each state. Under the NCES definition, instructional coordinators are staff who supervise instructional programs at the school or district. Instructional coordinators may be most comparable to what Arkansas calls curriculum supervisors. The most recent data available for all states are from 2015-16. According to the NCES data, Arkansas had 1 instructional coordinator per 500 students in 2015-16, which was higher than the national average of .87. (The enrollment data used to calculate the instructional coordinators per 500 students and the instructional staff support service expenditures below include pre-K students who have been excluded from the BLR’s foundation funding analysis elsewhere in this report.)

Number of Instructional Coordinators	
National Average	0.87 per 500 students
Arkansas	1.01 per 500 students

	Instructional Coordinators: Arkansas’s Rank
All States and Washington D.C. (49*)	19 <sup>th</sup> highest
SREB States (16)	4 <sup>th</sup> highest
Surrounding States (7, including AR)	2 <sup>nd</sup> highest

\* Data were not available for two states

NCES also provides data on total instructional staff support services in each state. These services are “activities that include instructional staff training, educational media (library and audiovisual), and other instructional staff support services,” according to the NCES definition. The most recent data available for all states are from 2014-15. According to the NCES data, Arkansas schools spent \$826 per student on instructional staff support in 2014-15, compared with \$536 per student nationally.

Instructional Staff Support Services Expenditures	
National Average	\$536 per student
Arkansas	\$826 per student

	Expenditures for Instructional Staff Support Services: Arkansas's Rank
All States and Washington D.C. (51)	4 <sup>th</sup> highest
SREB States (16)	1 <sup>st</sup>
Surrounding States (7, including AR)	1st

## LIBRARY MEDIA SPECIALISTS

The school library media specialist is responsible for budgeting, purchasing and maintaining an appropriate library collection for each school. Library media specialists also ensure that access to records and resource databases are available for students. As licensed teachers, library media specialists also teach students special subject offerings.

State accreditation standards require schools with fewer than 300 students to have a 1/2 time library media specialist. Schools with 300 to 1,499 students must have one full-time library media specialist, and schools with 1,500 or more students must have two library media specialists. (16.02.3)

State statute specifies that “only trained and certified library media services program personnel shall be assigned to carry out duties of the library media specialist” (§ 6-25-104). Library media specialists are master’s degree-level licensed staff with an endorsement in school library media. Arkansas code allows library media clerks to handle clerical duties when “supervised by the library media specialist.” State statute requires districts to ensure that no less than one third of a library media specialist’s time is used as an “information specialist, allowing time for administrative tasks such as ordering books and materials, processing items for usage, planning finances and accountability, organizing, directing and evaluating the library media program, and other management duties” (§ 6-25-103).

In 2016-17, 16 schools received accreditation violations for library media specialists who were inadequately licensed.

## BACKGROUND: LIBRARY MEDIA SPECIALISTS IN THE MATRIX

The matrix provides .85 FTE library media specialists for every 500 students. Like most school-level staff, the cost of each FTE in the library media specialist line is calculated using the teacher salary of \$64,196 for 2016-17 (base salary of \$51,093, plus benefits). For 0.85 FTE library media specialists, the matrix provides a total of \$54,567 for every 500 students or \$109.13 per student.

This staffing level is based on the recommendation of the General Assembly’s consultants in 2003, with adjustments in 2006 and 2014 to ensure districts could comply with the state’s accreditation standards. In 2003, Picus and Associates recommended the state provide funding for library media specialists for middle schools and high schools. At the elementary level, the consultants recommended considering library media specialists as part of the 20% non-core teachers provided in the matrix. They recommended funding 1.0 FTE library media specialist for middle schools, 1.5 FTE library media specialists for high schools and no additional positions for library media specialists at the elementary level. Based on these figures, the total amount of library media specialists for the prototypical school of 500 students was set at 0.7 FTEs. The General Assembly adopted this recommendation and established the library media specialist staffing level at 0.7 FTEs.

In 2006, when the state rehired Picus and Associates, the consultants noted that the staffing level of 0.7 library media specialists per 500 students would not be an adequate level for districts to comply with the state accreditation standards. The consultants recommended funding 1.0 FTE library media specialist in the matrix. The General Assembly, however, opted to set the staffing level at 0.825. That staffing level is the result of an analysis that examined the number of schools in 2006 at each enrollment size: under 300 students, 300-1,500 and more than 1,500. Based on the number of schools



at each level, 912.5 library media specialists were needed statewide, and the average number of library media specialists needed was calculated to be .825 per school (912.5/1,106).

School Size	# of Schools in 2005-06	Required Library Media Specialists	Library Media Specialists Multiplied by # of Schools
Under 300	407	0.5	203.5
300-1,499	689	1.0	689
1,500 +	10	2.0	20
<b>Totals</b>	<b>1,106</b>		<b>912.5</b>

During the 2014 Adequacy Study, the same analysis was applied to the number of schools operating in 2012-13. That analysis showed that an average of 0.85 FTE library media specialists would be needed to be in compliance with state standards. (This analysis included charter schools, some of which had waivers from the library media specialist-to-student ratio.) In their 2014 recommendations, the Education Committees voted to increase the number of library media specialists from 0.825 to 0.85 FTEs beginning in 2015-16.

School Size	# of Schools in 2016-17	Required Library Media Specialists	Library Media Specialists Multiplied by # of Schools
Under 300	315	0.5	157.5
300-1,499	716	1.0	716
1,500 +	14	2.0	28
<b>Totals</b>	<b>1,045</b>		<b>901.5</b>

The table above shows the number of schools by enrollment for the 2016-17 school year. Using these numbers, it appears that 0.86 FTE library media specialists would be needed to serve all schools. However, these data include open enrollment charter schools, all but one of which had waivers from the library media specialist-to-student ratio in 2016-17. Additionally 18 districts had a waiver from the library media specialist requirement through Act 1240 of 2015. Another 13 individual schools in traditional districts (conversion charter schools and schools of innovation) also had waivers from this requirement.

It is important to note that while the schools operating in 2016-17 required 901.5 librarians statewide (without considering any waivers from the librarian requirement), the matrix funded only about 803.5 library media specialists. Small districts tended to have schools that require more librarians than were funded, and large districts needed fewer librarians than were funded.

Districts	Funded	Average Needed Based on 2016-17 Schools	Difference
Small (750 or Less)	0.85	1.27	-0.42
Medium (751-5,000)	0.85	1.00	-0.15
Large (5,001+)	0.85	0.79	+0.06

That said, foundation funding is provided on a per-student basis—rather than based on existing school configurations. This provides a built-in incentive for schools to operate as efficiently as possible (i.e., encourages consolidation of small schools where a single large one makes more financial sense).

In their final report of the 2016 Adequacy Study, the Education Committees recommended increasing the per-student foundation funding rate for library media specialists by 1.25% for FY18 and 1.25% for FY19, based on the salary increase for teachers in the matrix. Act 743 of 2017 increased the per-student foundation funding rate to include the following amounts for library media specialists:

	2018	2019
Per-Student Rate	\$110.50	\$111.88
% Change	1.25%	1.25%

**ACTUAL STAFFING PATTERNS**

Districts used foundation funding to employ .90 FTE library media specialists per 500 students in 2016-17, while charter schools employed .08 FTEs. The lower staffing number for charter schools reflects the fact that most charter schools have waivers from the librarian staffing requirement. The district staffing number is slightly higher than the staffing level established in the matrix. The following table compares the matrix number for library media specialists with the average number of FTEs paid using foundation funds for all districts and charter schools.

<b>Library Media Specialists</b>			
	<b>Matrix FTE Number Per 500</b>	<b>Districts: Foundation Paid Staff Per 500</b>	<b>Charters: Foundation Paid Staff Per 500</b>
<b>2013-14</b>	0.825	0.90	0.13
<b>2014-15</b>	0.825	0.92	0.06
<b>2015-16</b>	0.850	0.89	0.10
<b>2016-17</b>	0.850	0.90	0.08

Large districts had lower staffing levels for library media specialists than smaller districts, which may be due to economies of scale. High-poverty districts had slightly higher staffing levels than low-poverty districts.

<b>By District Size</b>		
<b>Districts</b>	<b>2016-17 Foundation Paid Staff Per 500</b>	<b>2016-17 Total Librarians Per 500</b>
Small (750 or Less)	1.22	1.42
Medium (751-5,000)	0.98	1.04
Large (5,001+)	0.71	0.81

<b>By Poverty Level</b>		
<b>Districts</b>	<b>2016-17 Foundation Paid Staff Per 500</b>	<b>2016-17 Total Librarians Per 500</b>
Low Poverty (>70%)	0.87	0.94
Medium Poverty (70%-<90%)	0.93	1.04
High Poverty (90%+)	1.25	1.40

Districts paid library media specialists a salary that was, on average, more than \$2,900 more than the salary provided in the matrix. This average is calculated using expenditures from all funding sources, not just foundation funding.

	<b>Salary in the Matrix</b>	<b>Districts/Charters Actual Average Salary*</b>
Library Media Specialists	\$51,093	\$54,010

\*Calculated using all funding sources.

**STATE RANKING: STAFFING**

NCES provides data on the number of library media specialists and library support staff in each state. The most recent data available for all states are from 2015-16. According to the NCES data, Arkansas had a total of .96 FTE librarians per 500 students in 2015-16, compared with .43 librarians nationally. Arkansas had .19 library support staff per 500 students compared with .26 library support staff nationally. (The enrollment data used to calculate the library staff per 500 students include pre-K students who have been excluded from the BLR’s foundation funding analysis elsewhere in this report.)

Compared with all other states, Arkansas had the 3<sup>rd</sup> highest number of librarians for its student population. This high ranking may be related to the state requirement that schools employ a library media specialist. Arkansas is one of 19 states that have such a requirement, according to a

compilation of state school library policies, last updated in April 2017.<sup>13</sup> Some of the states that require districts to employ librarians do not specify a librarian to student ratio; some require only that districts have a librarian or that a librarian oversees districts’ library media programs. Nationally the number of school librarians has decreased about 19% from 1999-00 to 2015-16, a decrease of about 10,000 full-time school librarians, particularly during the recession and in the years that followed. Although the numbers of librarians in Arkansas has increased and decreased over the last 15 years, according to the NCES data, Arkansas did not experience nearly the decline in librarians that the nation as a whole experienced. The number of Arkansas librarian FTEs in 2015-16 is only about 7% lower than in 1999-00.

Number of Librarians	
National Average	0.43 per 500 students
Arkansas	0.96 per 500 students

	Librarians: Arkansas’s Rank
All States and Washington D.C. (51)	3 <sup>rd</sup> highest
SREB States (16)	1 <sup>st</sup>
Surrounding States (7, including AR)	1 <sup>st</sup>

Number of Library Support Staff	
National Average	0.26 per 500 students
Arkansas	0.19 per 500 students

	Library Support Staff: Arkansas’s Rank
All States and Washington D.C. (46*)	34 <sup>th</sup> highest
SREB States (15*)	8 <sup>th</sup> highest
Surrounding States (7, including AR)	4 <sup>th</sup> highest

\*Data were not available for five states, including one SREB state.

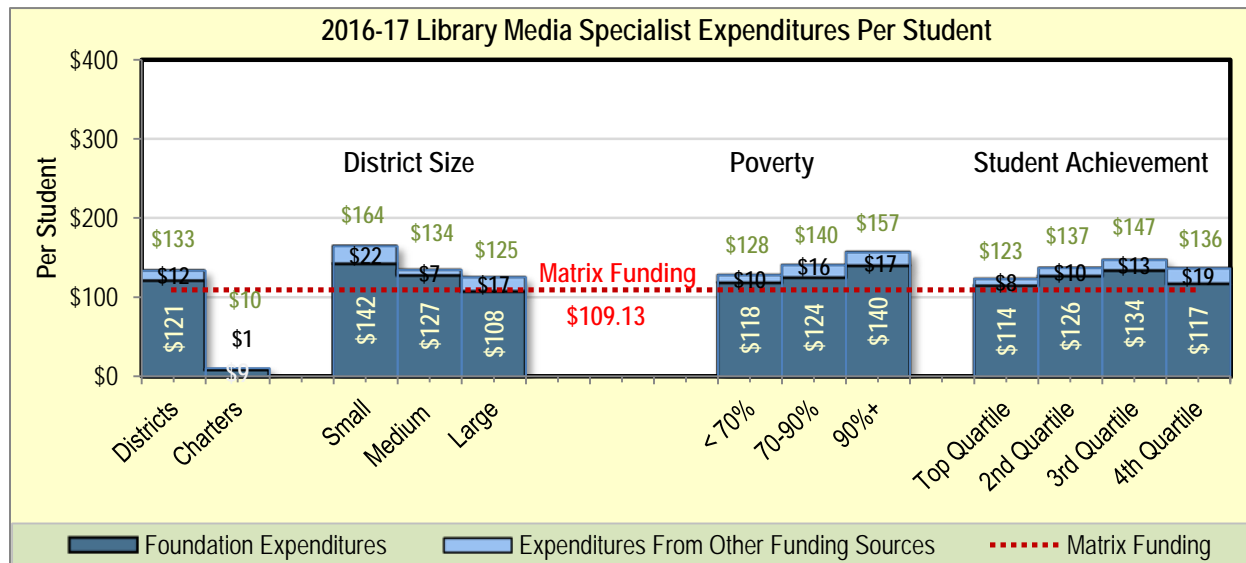
## DISTRICT AND CHARTER SCHOOL EXPENDITURES

In 2016-17, districts and charter schools statewide spent about \$55.8 million from foundation funding on library media specialists. This equates to about \$118 per student, or about \$9 more than the matrix amount.

Library Media Specialists: Foundation Funding and Expenditures		
	Funding	Expenditures
2015-16	\$51,125,352	\$55,241,801
2016-17	\$51,579,559	\$55,783,567

The following chart compares the per-student spending of traditional school districts and charter schools for library media specialists. It also compares districts’ per-student spending based on district size, poverty level and student achievement.

<sup>13</sup> Pennsylvania School Library Project, Requirements for School Librarians: A State-by-State Summary, April 25, 2017, [http://connect.ala.org/files/Requirements\\_for\\_School\\_Librarians\\_by\\_State-4-10-17.pdf](http://connect.ala.org/files/Requirements_for_School_Librarians_by_State-4-10-17.pdf)



Open-enrollment charter schools spent just \$9 per student on library media specialists, well under the amount provided in the matrix. This is primarily due to the fact that 23 of the 24 open-enrollment charter schools had waivers from the accreditation standard requiring a library media specialist. Just four open enrollment charter schools employed any librarian FTEs.

	Total Librarians Per 500 Students (all funding sources)	Average Salary
Districts	0.99	\$54,039
Charters	0.09	\$42,529

Smaller districts spent more for library media specialists than large districts, which may be due to economies of scale. Even though large districts paid librarians higher salaries than smaller districts, their student population allowed them to employ fewer library media specialists per 500 students.

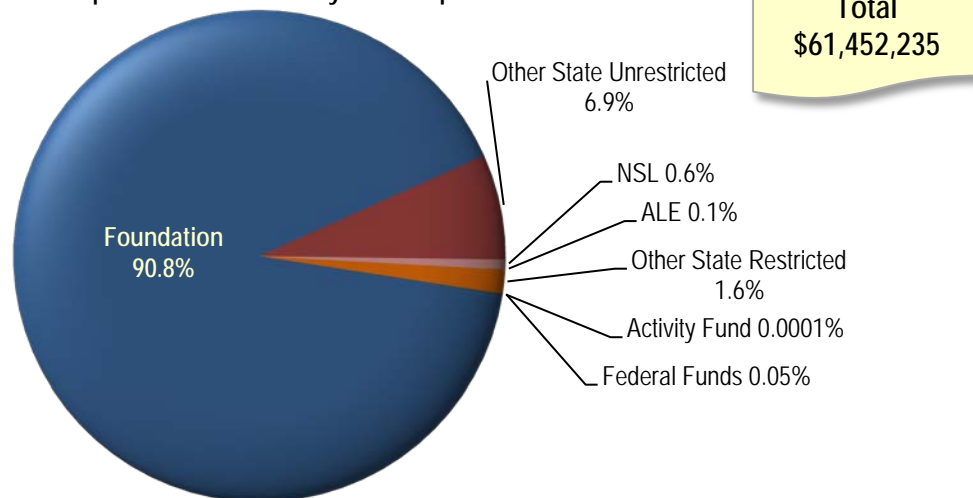
	Total Librarians Per 500 Students (all funding sources)	Average Salary
Small	1.42	\$46,129
Medium	1.04	\$51,617
Large	0.81	\$61,637

There was little difference among districts based on poverty or student achievement, though high poverty districts tended to spend more than lower poverty districts due to the fact that they employed more librarians per 500 students.

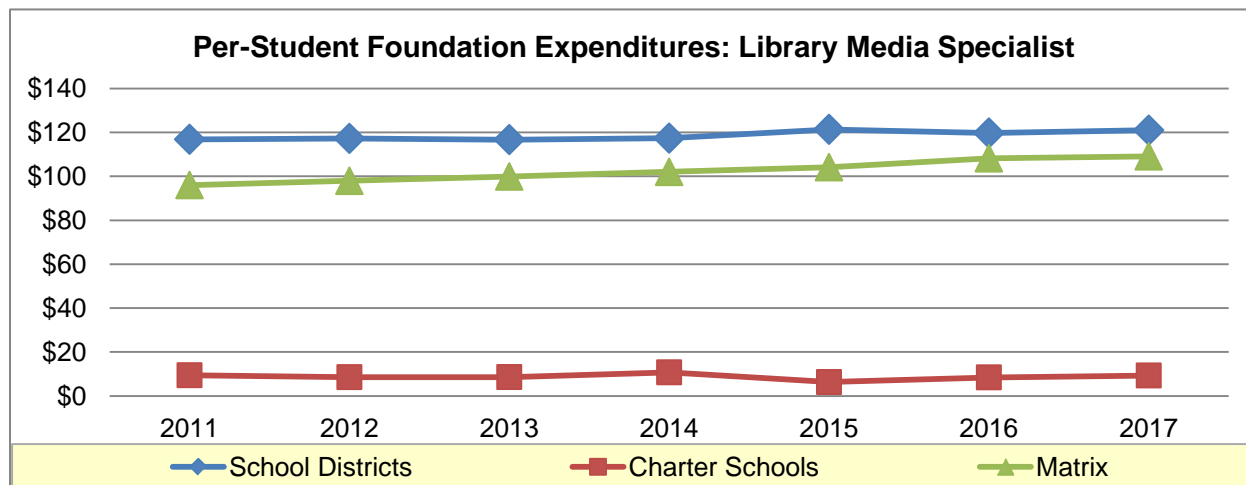
	Total Librarians Per 500 Students (all funding sources)	Average Salary
Low Poverty	0.94	\$54,356
Medium Poverty	1.04	\$54,105
High Poverty	1.40	\$44,843

The following pie chart shows the proportion of each funding type used to cover all expenditures for library media specialists. Districts and charter schools used foundation funding for about 91% of their total expenditures for library media specialists.

2016-17 Expenditures for Library Media Specialists



The following graph shows the per-student expenditures for library media specialists from foundation funding between 2011 and 2017. Districts have historically spent more from foundation funding than the matrix provided. The gap between the funding amount and the expenditure amount narrowed in 2016, in part, due to the fact that the matrix level increased when the number of funded librarians increased from .825 to .85. Charter schools have historically spent well below the matrix level for librarians largely because most charters do not employ librarians.



**COUNSELORS, NURSES, AND OTHER PUPIL SUPPORT**

This line of the matrix provides funding for guidance counselors, nurses, and other pupil support staff, such as speech therapists, social workers, psychologists, and family outreach workers.

State statute requires all districts to develop and implement a plan describing how individual student services will be coordinated and provided (§ 6-18-1004). State statute specifies that districts’ “student services program” must include guidance counseling services, psychological services, social work services, career services and health services.

According to the ADE’s 2017 Public School Student Services Program Annual Report (published Jan. 1, 2018), 99.9% of schools reported having a student services plan.

The matrix establishes a staffing level of 2.5 FTEs for counselors, nurses and other pupil support. This includes 1.11 FTEs for a counselor, .67 FTEs for a nurse and .72 FTEs for other student services.

	FTEs in the Matrix
Counselors	1.11
Nurses	.67
Other Pupil Support Staff	.72
<b>Total</b>	<b>2.50</b>

## COUNSELORS

A guidance counselor is a master's-level certified staff member responsible for a wide variety of activities. According to state law (§ 6-18-1005), guidance and counseling services include:

- Individual and group counseling.
- Orientation programs for new students.
- Academic advisement for class selection.
- Consultation with parents, faculty, and out-of-school agencies concerning student problems and needs.
- Utilization of student records and files.
- Interpretation of assessments and dissemination of results to the school, students, parents, and community.
- Following up with early school dropouts and graduates.
- A school-initiated system of parental involvement.
- An organized system of informational resources on which to base educational and vocational decision making.
- Educational, academic assessment, and career counseling, including advising students on the national college assessments, workforce opportunities, and alternative programs that could provide successful high school completion and postsecondary opportunities for students.
- Coordinating administration of the Test for Adult Basic Education or the General Educational Development pretest to students by designating appropriate personnel, other than the school guidance counselor, to administer the tests.
- Classroom guidance.
- Guidance in understanding the relationship between classroom performance and success in school.

State accreditation standards require districts to have at least one counselor for every 450 students, or approximately 1.11 FTEs per 500 students (16.01.3). Fifteen charter schools had waivers from this requirement in 2016-17, as well as two traditional school districts and three individual schools.

In 2016-17, 27 schools were cited for accreditation violations stemming from guidance counselors who were not adequately licensed. One district was placed on probation for failing to meet the 450 to 1 counselor ratio.

State law requires guidance counselors to spend at least 75% of their work time each month providing “direct counseling related to students” and prohibits them from spending more than 25% of their time each month on “administrative activities” [§ 6-18-1005 (b)].

State law requires ADE to produce an annual report describing districts’ compliance with state laws regarding the provision of student services, including guidance counseling [§ 6-18-1007(a)]. To produce this report, ADE surveys school counselors for each traditional public school district and the charter schools that have not received waivers from statutory reporting requirement. According to the Jan. 1, 2018, report, there were about 1,300 school counselors in the state in 2016-17. The report indicates that 187 counselors reported being assigned to more than 450 students. Of those 187 counselors, 18 reported having more than 600 students. Though some counselors are assigned more than 450 students, their districts still may be in compliance with the accreditation standards if the district as a whole meets the 450 to 1 student-to-counselor ratio. The report also

noted that 22 counselors said they spend less than 75% of their time providing direct counseling. The report notes that the survey was conducted before districts administered state assessments, which typically consumes significant amounts of counselors' time. The report noted, "Many counselors are test coordinators and spend a great deal of time scheduling, training, and preparing technology for assessments. In addition, counselors assigned supplementary non-counseling duties, such as coordinating 504 and RTI [Response to Intervention] programs, inputting APSCN data, building master schedules and other clerical duties, report that they are finding it increasingly difficult to provide direct support to students 75% of their time each month during the regular school day."

**BACKGROUND: COUNSELORS IN THE MATRIX**

The matrix provides funding for 1.11 FTE guidance counselors for every 500 students. Like most school-level staff, the cost of each FTE counselor in the matrix is calculated using the teacher salary of \$64,196 for 2016-17 (base salary of \$51,093, plus benefits). For 1.11 guidance counselors, the matrix provides \$71,257 for every 500 students or \$142.52 per student.

This staffing level is based on the recommendation of the General Assembly's consultants in 2003, with an adjustment based on the state's accreditation standards. In 2003, Picus and Associates recommended one pupil support staff for every 100 students eligible for free or reduced price lunch (FRPL students). They argued that pupil support should increase or decrease with the level of poverty in the population. The consultants also recommended one counselor for every 500 middle school students and two counselors for every 500 high school students. For elementary schools, the consultants did not recommend any additional counselors beyond the pupil support staff based on FRPL students.

The General Assembly elected to create a separate source of funding based on the number of FRPL students (NSL state categorical funding) and authorized districts to use this funding to provide certain pupil support services, including counselors. The General Assembly also opted to provide student support services through the matrix. They established a matrix staffing level for counselors based on the state accreditation standards (16.01.3), which require districts to have at least one counselor for every 450 students, or approximately 1.11 FTEs per 500 students.

In 2006, when Picus and Associates were rehired, they endorsed the staffing levels set for pupil support in the matrix, which included 1.11 counselors, but they also recommended enhancing NSL funding with an additional 1.0 FTE for additional pupil support services staff for every 100 FRPL students. The General Assembly decided against implementing this recommendation because the Adequacy Study Oversight Subcommittee found that "funds received by school districts through state foundation funding aid and categorical funding for [FRPL] students is adequate, when school districts spend those funds efficiently."<sup>14</sup> The staffing level for guidance counselors has remained at 1.11 since it was originally established.

In their final report of the 2016 Adequacy Study, the Education Committees recommended increasing the per-student foundation funding rate for guidance counselors by 1.25 % for FY18 and 1.25% for FY19, based on the salary increase for teachers in the matrix. Act 743 of 2017 increased the per-student foundation funding rate to include the following amounts for guidance counselors:

	2018	2019
Per-Student Rate	\$144.30	\$146.10
% Change	1.25%	1.25%

<sup>14</sup> Adequacy Study Oversight Subcommittee (2006). "A Report on Legislative Hearings For the 2006 Interim Study on Educational Adequacy, adopted by the House and Senate Education."

## ACTUAL STAFFING PATTERNS AND SALARIES

On average, districts use foundation funding to employ 1.16 FTE guidance counselors per 500 students. This staffing level is slightly more than the staffing level established in the matrix. Charter schools employed fewer counselors per 500 students largely due to the fact that many charter schools have waivers from the counselor accreditation standard. The following tables compare the matrix staffing level for counselors with the average foundation funded FTEs for all districts and charter schools.

Guidance Counselors			
	Matrix FTE Number Per 500	Districts: Foundation Paid Staff Per 500	Charters: Foundation Paid Staff Per 500
2013-14	1.11	1.15	0.59
2014-15	1.11	1.15	0.38
2015-16	1.11	1.16	0.32
2016-17	1.11	1.16	0.63

Small districts tended to employ more counselors per 500 students, which likely reflects the economies of scale larger districts enjoy. High poverty districts tended to employ fewer counselors per 500 students using foundation funding, but more counselors when all funding sources are considered. This may reflect the fact that high-poverty districts have greater amounts of other funding sources, such as NSL state categorical funds, they can use to pay for guidance counselors. That said, ADE Rules Governing the Distribution of Student Special Needs Funding prohibit the use of NSL funding “to meet or satisfy the Arkansas Standards for Accreditation of Arkansas Public Schools and School Districts” (6.06). In other words, districts cannot use NSL funding to meet the 450-to-1 counselor to student ratio, but they can use NSL funding to cover the cost of counselors above that level. Collectively high poverty districts used NSL funding to cover about 32% of their expenditures for counselors.

By District Size		
Districts	2016-17 Foundation Paid Staff Per 500	2016-17 Total Counselors Per 500
Small (750 or Less)	1.23	1.69
Medium (751-5,000)	1.20	1.35
Large (5,001+)	1.10	1.28

By Poverty Level		
Districts	2016-17 Foundation Paid Staff Per 500	2016-17 Total Counselors Per 500
Low Poverty (>70%)	1.19	1.32
Medium Poverty (70%-<90%)	1.14	1.39
High Poverty (90%+)	0.82	1.54

Districts paid guidance counselors a salary that was, on average, \$6,200 more than the salary provided in the matrix. This average is calculated using expenditures from all funding sources, not just foundation funding.

	Salary in the Matrix	Districts/Charters Actual Average Salary*
Guidance Counselors	\$51,093	\$57,357

\*Calculated using all funding sources.

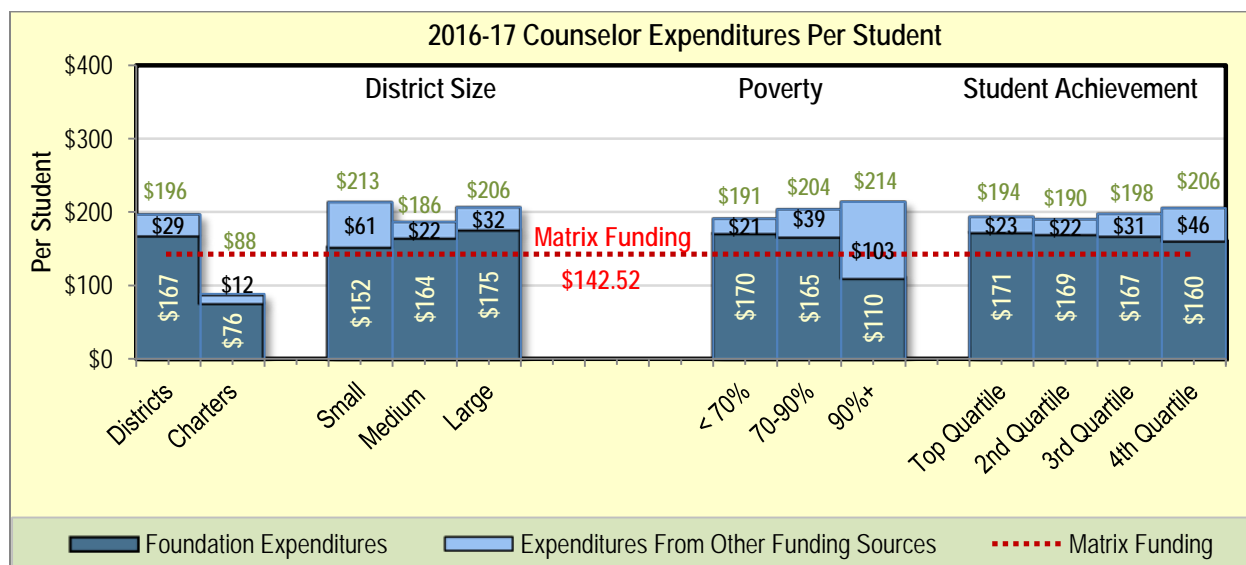


### DISTRICT AND CHARTER SCHOOL EXPENDITURES

In 2016-17, districts and charter schools statewide spent about \$77.8 million from foundation funding on counselors. This equates to about \$165 per student.

Counselors: Foundation Funding and Expenditures		
	Funding	Expenditures
2015-16	\$66,761,027	\$76,855,944
2016-17	\$67,356,836	\$77,787,621

The following chart compares the per-student spending of traditional school districts and charter schools for guidance counselors. It also compares districts’ per-student spending based on district size, poverty level and student achievement.



On a per-student basis, districts spent about \$167 per student from foundation funding on guidance counselors in 2016-17, or about \$25 more per student than the matrix provides. That may be due, in part, to the fact that districts pay counselors salaries that are higher than the salary provided in the matrix. Charter schools spent \$76 per student from foundation funding—well below the matrix amount. This may be due to the fact that 15 of the 24 charter schools operating in 2016-17 had waivers from the guidance counseling accreditation standards.

	Total Counselors Per 500 Students (all funding sources)	Average Salary
Districts	1.35	\$57,471
Charters	0.67	\$49,099

While larger districts spent more foundation funding per student than smaller districts, the difference in overall spending (from all funding sources) did not follow a distinct pattern. While small districts employed more staff per student, large districts paid higher salaries, which evened out the overall spending.

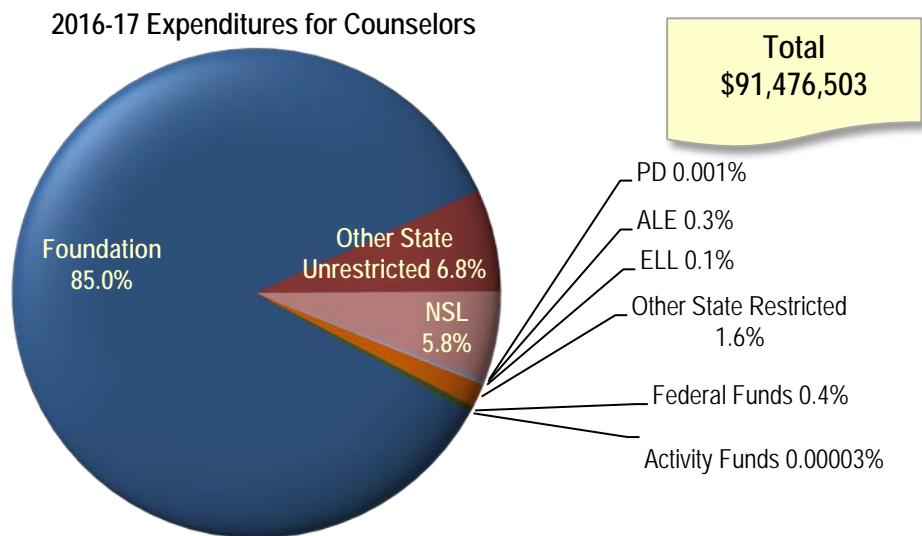
	Total Counselors Per 500 Students (all funding sources)	Average Salary
Small	1.69	\$49,513
Medium	1.35	\$54,878
Large	1.28	\$63,699

Low-poverty districts tended to pay more per student in foundation funding for guidance counselors than high-poverty districts, but high-poverty districts spent more on counselors from all funding sources. This results from the fact that high poverty districts use other funding sources, such as NSL

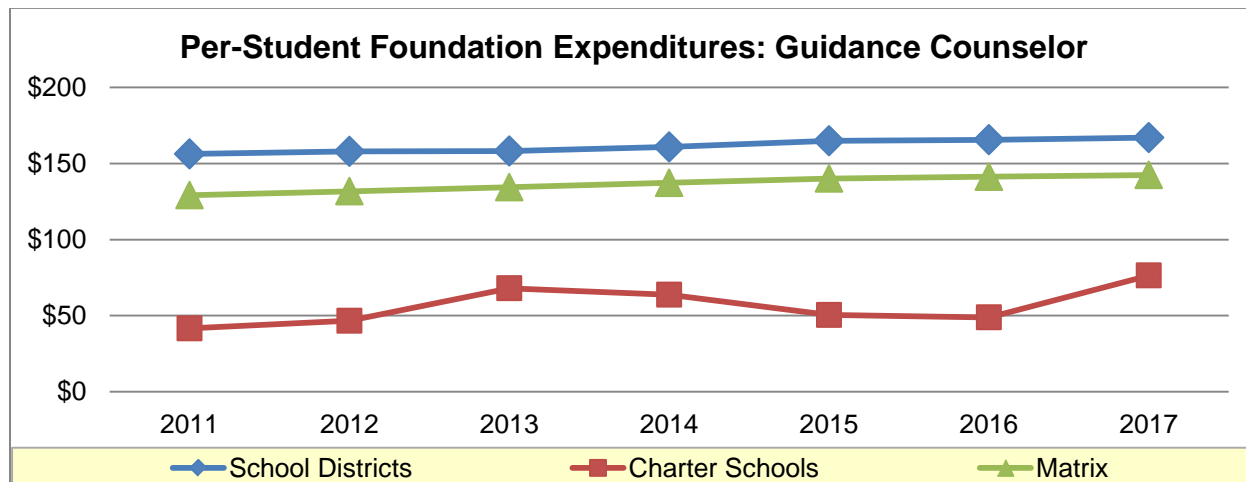
state categorical funds, to employ some counselors. There was little difference among districts when grouped by student achievement.

	Total Counselors Per 500 Students (all funding sources)	Average Salary
Low Poverty	1.32	\$57,373
Medium Poverty	1.39	\$57,780
High Poverty	1.54	\$53,383

The following pie chart shows the proportion of each funding type used to cover all expenditures for guidance counselors. Districts used foundation funding to cover 85% of their total expenditures for guidance counselors in 2016-17.



The following graph shows the per-student expenditures for guidance counselors from foundation funding between 2011 and 2017. Traditional districts consistently spent more than what the matrix provides, while charter schools spent far less than the matrix level.



**STATE RANKING: STAFFING**

NCES provides data on the number of guidance counselors in each state. The most recent data available for all states are from 2015-16. According to the NCES data, Arkansas had a total of 1.32 guidance counselors per 500 students in 2015-16, compared with 1.08 guidance counselors nationally. (The enrollment data used to calculate the guidance counselors per 500 students include pre-K students who have been excluded from the BLR’s foundation funding analysis elsewhere in this report.)

Number of Guidance Counselors	
National Average	1.08 per 500 students
Arkansas	1.32 per 500 students

	Guidance Counselors: Arkansas’s Rank
All States and Washington D.C. (51)	15 <sup>th</sup> highest
SREB States (16)	5 <sup>th</sup> highest
Surrounding States (7, including AR)	3 <sup>rd</sup> highest

**NURSES**

School nurses assess the health of students, deliver emergency care, administer medication and vaccines, perform health care procedures, and provide required health screenings.

State statute requires districts to provide health services as part of their student services program [§ 6-18-1005(a)(6)]. ADE accreditation standards require that school districts’ health services program be operated “under the direction of a licensed nurse” (16.03.1) and that districts provide the program with necessary facilities, equipment and materials. The standards require the health services programs to include screening, referral and follow-up procedures for all students.

State statute requires districts to have at least 1 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)). ADE has long held the legal interpretation that funding was never made available for school nurses and therefore the nurse staffing levels were not a requirement. In 2016, the Attorney General agreed, opining “the mere existence of foundation funding does not mean that funds are ‘available’ under subsection 6-18-706(e). ... If the mere existence of foundation funding were sufficient to automatically trigger the ratio requirements of section 6-18-706, then the triggering provision would be superfluous, as there is always some foundation funding in each year. ... No school is required to spend foundation funding on school nurses. So we must conclude that foundation funding is not ‘available’ so as to trigger the ratios under section 6-18-706.”<sup>15</sup>

Despite the fact that the student-to-nurse ratios are not enforced, most school districts did meet the statutory staffing level based on their enrollment for 2016-17. Only 19 districts employed fewer nurses than the statutory level (not including nurses hired as contractors). Of those, all but one were off by less than 1 FTE. No charter schools or districts were cited for accreditation violations related to the school nurse or the health services program in 2016-17.

<sup>15</sup> Arkansas Attorney General Opinion 2016-028

Act 935 of 2015 required districts to begin reporting the number of students with varying degrees of health concerns as defined in the following table. In 2016-17, .01% of students were considered nursing dependent, 1% were medically fragile, and 3% were considered medically complex. Act 935 establishes nurse-to-student ratios for each acuity level but does not require districts to adhere to them. At these levels, districts and charter schools collectively would need to employ 861 school nurses (not including one district and one charter school whose student acuity data appears to be inaccurate). Districts and charter schools currently employ more school nurses than that—about 872 (not including contracted nurses), though some districts and charter schools are better staffed to meet the ratios than others.

Acuity Level/ Act 935 Nurse-to- Student Ratio	Definition	Number of Students and % of Total
Level 1 1:750	No healthcare concerns identified. The student’s physical and/or social-emotional condition is stable and sees the Nurse at least once a year for screening and occasionally as needed.	420,058, 85% of all students
Level 2 1:400	Health concerns require an Individualized Healthcare Plan (IHP). The student’s physical and/or social-emotional condition is currently uncomplicated and predictable. Occasional monitoring varies from biweekly to annually. Example of a level 2 would include ADHD, dental disease, feeding tube.	52,168, 11% of all students
Level 3 1:225	Medically Complex: The medically complex student has a complex and/or unstable physical and/or social-emotional condition that requires daily treatments and close monitoring by a professional registered nurse. Example of level 3 would include cancer, pregnancy, moderate to severe asthma.	17,154, 3% of all students
Level 4 1:125	Medically Fragile: Students with complex health care needs in this category face daily the possibility of a life-threatening emergency requiring the skill and judgment of a professional nurse. An individual health care plan of nursing care developed by a registered nurse must be complete, current, and available at all times to personnel in contact with these children. Example of level 4 would be severe seizures, tracheostomy with suctioning.	3,198, 1% of all students
Level 5 1:1	Nursing Dependent: Nursing dependent students require 24 hours/day, frequently one-to-one, skilled nursing care for survival. Many are dependent on technological devices for breathing, and/or for continuous nursing assessment and intervention. Example of level 5 is student on a respirator.	69, .01% of all students

Source: Definitions are those provided in the Statewide Information System (SIS) Handbook, 2016-17, p. 103 and 104

Note: The data above exclude one open enrollment charter school and one school district based on the fact that the numbers reported in APSCN far exceeded total enrollment numbers for those two entities.

**BACKGROUND: SCHOOL NURSES IN THE MATRIX**

The matrix provides funding for a .67 FTE nurse for every 500 students. Like most school-level staff, the cost of each FTE nurse in the matrix is calculated using the teacher salary of \$64,196 for 2016-17 (base salary of \$51,093). Districts and charter schools received \$43,011 for a school of 500 students, or \$86.02 per student.

This staffing level is based on the recommendation of the General Assembly’s consultants, with an adjustment based on the state’s accreditation standards. Picus and Associates’ 2003 report made no specific mention of school nurses, but their 2006 report noted that nurses had been included in their earlier recommendation for 1.0 FTE pupil support staff for every 100 FRPL students. As mentioned above, the General Assembly passed Act 59 of the Second Extraordinary Session of 2003, which adopted a foundation funding rate calculated to include a staffing level of 2.5 FTE pupil support services staff, including school nurses. That same session, the General Assembly also

passed Act 67, which increased the number of required school nurses from 1 per 1,000 students to 1 per 750 students. However, the new law also added a provision making the statute effective “only upon the availability of state funds.”

In 2006, the Adequacy Study Oversight Subcommittee specified in its report that, of the 2.5 FTEs in the pupil support line of the matrix, .67 FTEs per 500 students are intended for nursing staff. Since 2006, the matrix has continued to fund .67 school nurses for every 500 students.

In their final report of the 2016 Adequacy Study, the Education Committees recommended increasing the per-student foundation funding rate for school nurses by 1.25% in FY18 and FY19 based on the salary increase for teachers in the matrix. Act 743 of 2017 increased the per-student foundation funding rate to include the following amounts for school nurses:

	2018	2019
Per-Student Rate	\$87.10	\$88.19
% Change	1.25%	1.25%

### ACTUAL STAFFING PATTERNS AND SALARIES

On average, districts used foundation funding to employ .48 FTE nurses per 500 students, while charter schools employ .73 nurses per 500 students with foundation funding. The following table compares the matrix number for nurses with the average number of FTE nurses employed by districts and charter schools.

Nurses			
	Matrix FTE Number Per 500	Districts: Foundation Paid Staff Per 500	Charters: Foundation Paid Staff Per 500
2013-14	0.67	0.47	0.91
2014-15	0.67	0.47	0.73
2015-16	0.67	0.48	0.61
2016-17	0.67	0.48	0.73

Large districts employed fewer nurses per 500 students than smaller districts—both those paid using foundation funding and those paid from all funding sources. When districts are grouped by concentrations of poverty, there was little difference in the number of foundation paid nurses per 500 students. However, when the total number of nurses is analyzed, high poverty districts employed more nurses compared with lower poverty districts. This is likely due to the fact that high poverty districts have more NSL state categorical funds to use to pay for school nurses than lower poverty districts.

By District Size		
Districts	2016-17 Foundation Paid Staff Per 500	2016-17 Total Nurses Per 500
Small (750 or Less)	0.70	1.21
Medium (751-5,000)	0.46	0.96
Large (5,001+)	0.45	0.83

By Poverty Level		
Districts	2016-17 Foundation Paid Staff Per 500	2016-17 Total Nurses Per 500
Low Poverty (>70%)	0.55	0.91
Medium Poverty (70%-<90%)	0.37	0.95
High Poverty (90%+)	0.50	1.19

Districts paid nurses a salary that was, on average, about \$15,500 less than the salary provided in the matrix. This average is calculated using expenditures from all funding sources, not just foundation funding.

	Salary in the Matrix	District/Charter Actual Average Salary*
Nurses	\$51,093	\$35,601

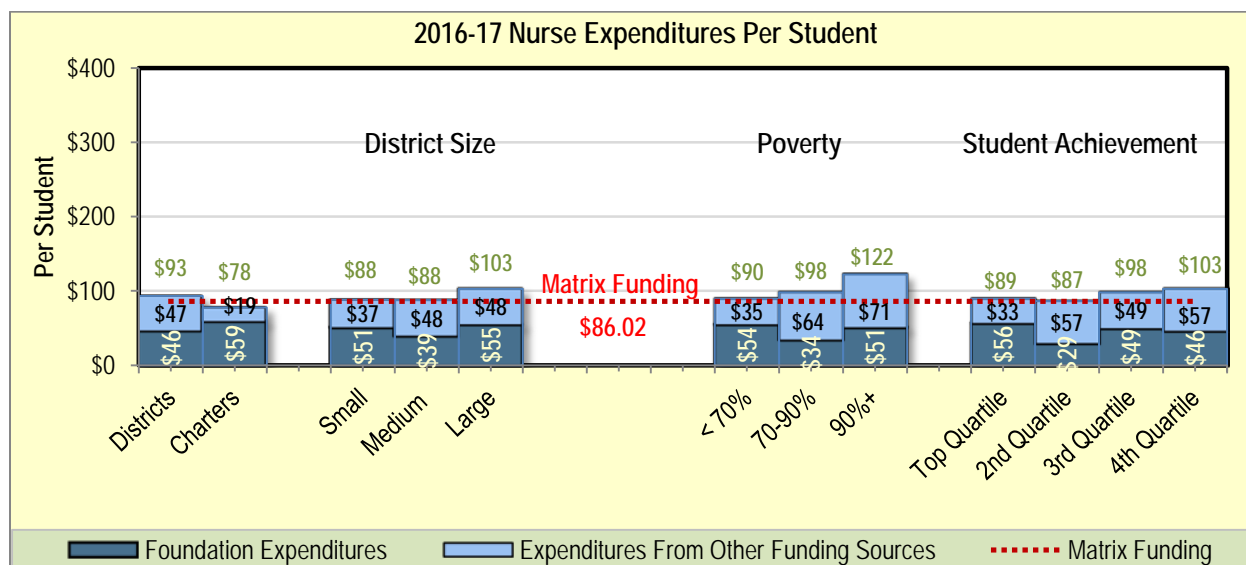
\*Calculated using all funding sources.

### DISTRICT AND CHARTER SCHOOL EXPENDITURES

In 2016-17, districts and charter schools statewide spent about \$22 million from foundation funding on nurses. This equates to about \$46.50 per student, or nearly \$40 less foundation funding per student than the matrix provides. Districts may have spent less foundation funding on nurses because they have other sources of funding to use for this purpose.

Nurses: Foundation Funding and Expenditures		
	Funding	Expenditures
2015-16	\$40,298,473	\$21,325,940
2016-17	\$40,656,829	\$21,977,162

The following chart compares the per-student spending of traditional school districts and charter schools for nurses. It also compares districts' per-student spending based on district size, poverty level and student achievement.



Charter schools spent more foundation funding per student on nurses compared with districts, but districts spent more overall funding per student. Eighteen of the 24 open-enrollment charter schools had waivers from the nurse-to-student ratio or the health services program statutes or standards. Despite these waivers, most charter schools recorded expenditures for school nurses. Only five of the 24 charter schools had no nurse expenditures at all. Four had less than \$10,000 of health expenditures.

	Total Nurses Per 500 Students (all funding sources)	Average Salary
Districts	0.93	\$35,645
Charters	0.87	\$33,870

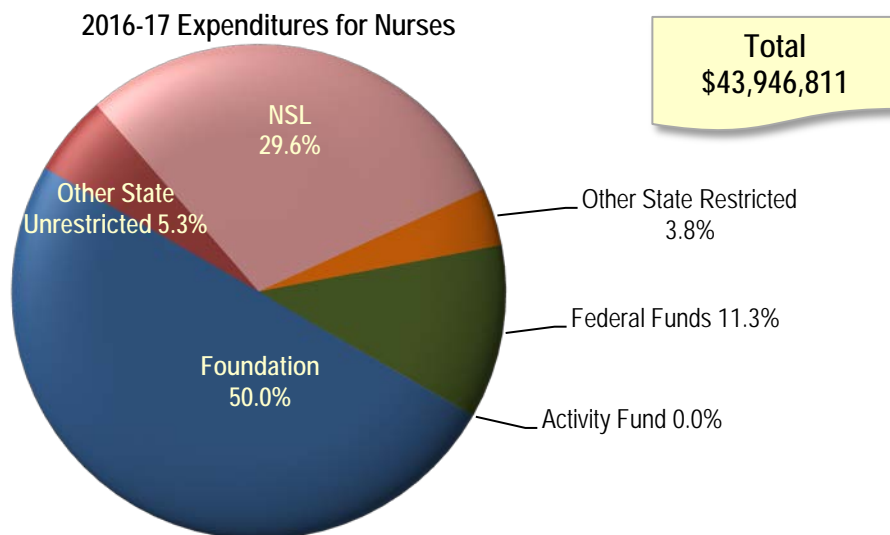
Small and large districts spent similar amounts of foundation funding per student, but large districts spent more overall from all funding sources. Despite the fact that large districts employed fewer nurses per 500 students, they had higher per-student expenditures than small districts because they paid significantly higher salaries.

	Total Nurses Per 500 Students (all funding sources)	Average Salary
Small	1.21	\$26,706
Medium	0.96	\$32,575
Large	0.83	\$43,572

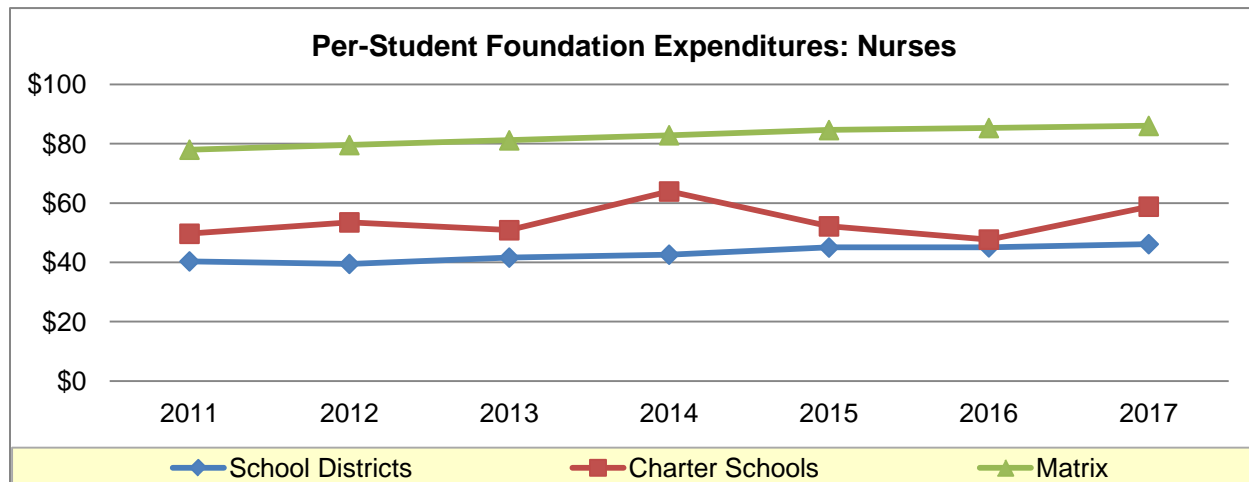
High poverty school districts had higher total nurse expenditures per student than lower poverty districts because they employ more nurses per student. Although high poverty districts receive more NSL state categorical funds than lower poverty districts, the proportion of their nurse expenditures made using NSL funds was similar to that of the mid-level poverty districts—46% for high poverty districts, compared with 43% for the mid-level poverty districts. Low poverty districts used NSL funds to cover just 19.5% of their nurse expenditures.

	Total Nurses Per 500 Students (all funding sources)	Average Salary
Low Poverty	0.91	\$35,302
Medium Poverty	0.95	\$36,160
High Poverty	1.19	\$34,727

In addition to foundation funding, districts and charter schools have a variety of other sources of funding they can use for nurses. The following pie chart shows the proportion of each funding type used to cover all nurse expenditures. Districts and charter schools used foundation funding to cover just 50% of their total expenditures for nurses. More than half of the districts used state NSL funding for this purpose, thereby reducing their reliance on foundation funding to employ nurses.



The following graph shows the per-student expenditures for school nurses from foundation funding between 2011 and 2017. Both districts and charter schools have historically spent less foundation funding for school nurses than they received through the matrix for that purpose. This reflects the availability of other sources of funding that can be used for school nurses.



**OTHER PUPIL SUPPORT SERVICES**

Other pupil support services include psychological services, social work services, speech pathology services and audiology services. Although schools may be required to provide these services for special education students whose individualized education program (IEP) calls for them, there are no general standards requiring districts to provide these services.

**BACKGROUND: STUDENT SUPPORT SERVICES IN THE MATRIX**

The matrix provides 0.72 FTE positions within the 2.5 pupil support services staff for student services personnel described under the Public School Student Services Act (§ 6-18-1001 et seq.). This number is calculated as the remaining pupil support staff (from the 2.5 total pupil support staff), after accounting for 1.11 counselors and .67 school nurses.

Like most school-level staff, the cost of each FTE of school support staff is calculated using the teacher salary of \$64,196 for 2016-17 (base salary of \$51,093, plus benefits). For 0.72 FTE school support staff, the matrix provides a total of \$46,221 for every 500 students or \$92.44 per student.

In their final report of the 2016 Adequacy Study, the Education Committees recommended increasing the per-student foundation funding rate for pupil support personnel by 1.25% for FY18 and FY19, based on the salary increase for teachers in the matrix. Act 743 of 2017 increased the per-student foundation funding rate to include the following amounts for pupil support personnel:

	2018	2019
Per-Student Rate	\$93.60	\$94.77
% Change	1.25%	1.25%

**ACTUAL STAFFING PATTERNS AND SALARIES**

On average, districts used foundation funding to employ 0.2 FTE pupil support services per 500 students in 2016-17. This staffing level is a little less than a quarter of the staffing level established in the matrix. The following table compares the matrix number for pupil support staff with the average staffing level for all districts.

	Pupil Support Staff		
	Matrix FTE Number Per 500	Districts: Foundation Paid Staff Per 500	Charters: Foundation Paid Staff Per 500
2013-14	0.72	0.19	0.39
2014-15	0.72	0.18	0.25
2015-16	0.72	0.21	0.19
2016-17	0.72	0.20	0.28



In 2016-17, smaller districts employed fewer student support staff using foundation funding than larger districts. This is true in terms of staff paid using foundation funding and total staff paid using all funding sources. This likely reflects the fact that large districts can afford to directly employ pupil support services, while small districts may rely more heavily on contracting with service providers. Contracted student support services are not included in these FTE numbers. High-poverty districts employed fewer student support staff using foundation funding than low-poverty districts, reflecting the fact that high poverty districts have other sources of funds they can use to employ these staff. When examining staffing patterns for staff using all funding sources, there were minimal differences among the groups.

By District Size		
Districts	2016-17 Foundation Paid Staff Per 500	2016-17 Total Support Staff Per 500
Small (750 or Less)	0.13	0.33
Medium (751-5,000)	0.14	0.50
Large (5,001+)	0.28	0.82

By Poverty Level		
Districts	2016-17 Foundation Paid Staff Per 500	2016-17 Total Support Staff Per 500
Low Poverty (>70%)	0.19	0.57
Medium Poverty (70%-<90%)	0.21	0.66
High Poverty (90%+)	0.02	0.52

Some types of pupil support staff employed directly by districts and charter schools had an average salary above the salary in the matrix, while other staff had an average salary below the matrix level. This average is calculated using expenditures from all funding sources, not just foundation funding.

	Total FTEs Statewide	Salary in the Matrix	District/Charter Actual Average Salary
Psychologist*	179	\$51,093	\$58,258
Social Worker*	112		\$38,197
Attendance	42		\$27,169
Speech Pathology/Audiology	107		\$54,749
Other*	128		\$41,407

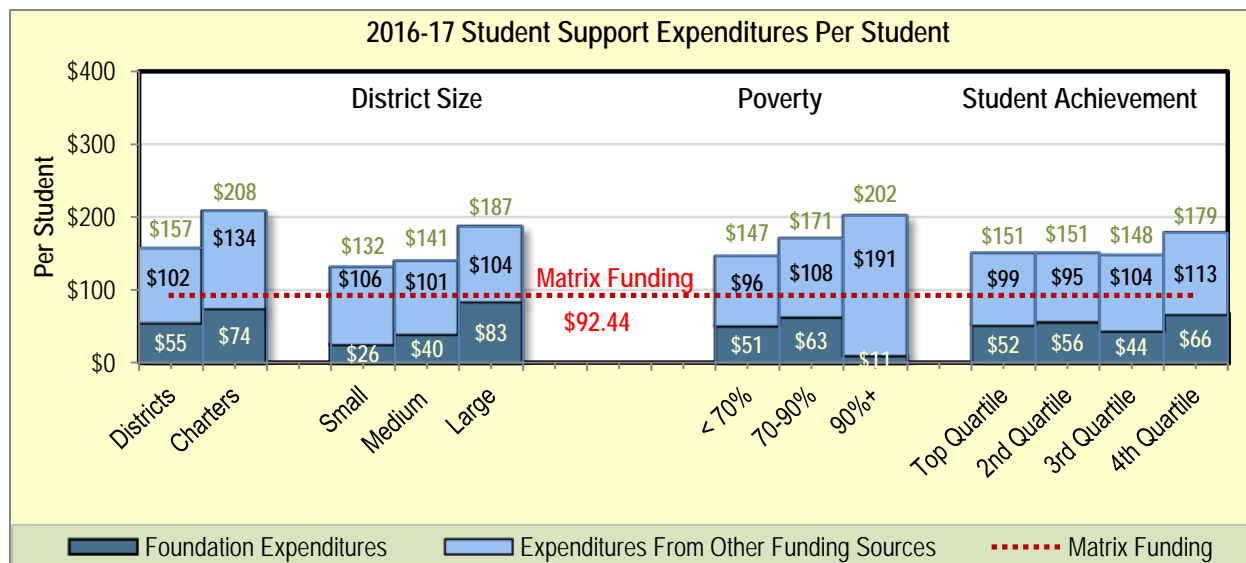
\*Psychologists include classified “psychological services”. Social workers include certified “attendance/social work services”. Other includes “other professional personnel” and “other support services”.

### DISTRICT AND CHARTER SCHOOL EXPENDITURES

In 2016-17, districts and charter schools collectively spent about \$26.3 million from foundation funding on other student support services. This equates to about \$56 per student, or about \$37 per student less than the matrix provides. Districts may have spent less foundation funding on student support services because they have other sources of funding to use for this purpose.

Other Pupil Support Services: Foundation Funding and Expenditures		
	Funding	Expenditures
2015-16	\$43,302,790	\$26,074,946
2016-17	\$43,690,920	\$26,321,996

The following chart compares the per-student spending of traditional school districts and charter schools for student support services. It also compares districts’ per-student spending based on district size, poverty level and student achievement.



Charter schools’ per-student expenditures for student support services exceeded that of school districts in both foundation funding expenditures and in total expenditures from all funding sources. Charter school expenditures outpaced those of school districts most significantly in the following areas:

- Speech pathology
- Parental involvement
- Student accounting: These expenditures are made for “activities of acquiring and maintaining records of school attendance, home, family characteristics and census data, portions of which become a part of the student’s cumulative record,” according to the Arkansas Financial Accounting Handbook for Arkansas Public Schools.

For student support services, large districts spent more than three times the amount of foundation funding per student that small districts spent. Even considering overall spending (from all funding sources), large districts spent about 42% more per student than small districts.

Large districts tend to provide these services by directly employing professionals, while small district rely much more heavily on contracting for the services. With greater student populations, large districts require enough services to make employing staff make fiscal sense. The following table shows the percentage of all student support expenditures (including those made with non-foundation funding) that are made employing staff directly and the percentage made contracting with outside providers.

	Hire Employees Directly	Use Purchased Services	Total Student Support Expenditures
Small	28%	72%	100%
Medium	49%	51%	100%
Large	86%	14%	100%

The service areas with the most significant differences between the per-student expenditures of large districts and small districts are in:

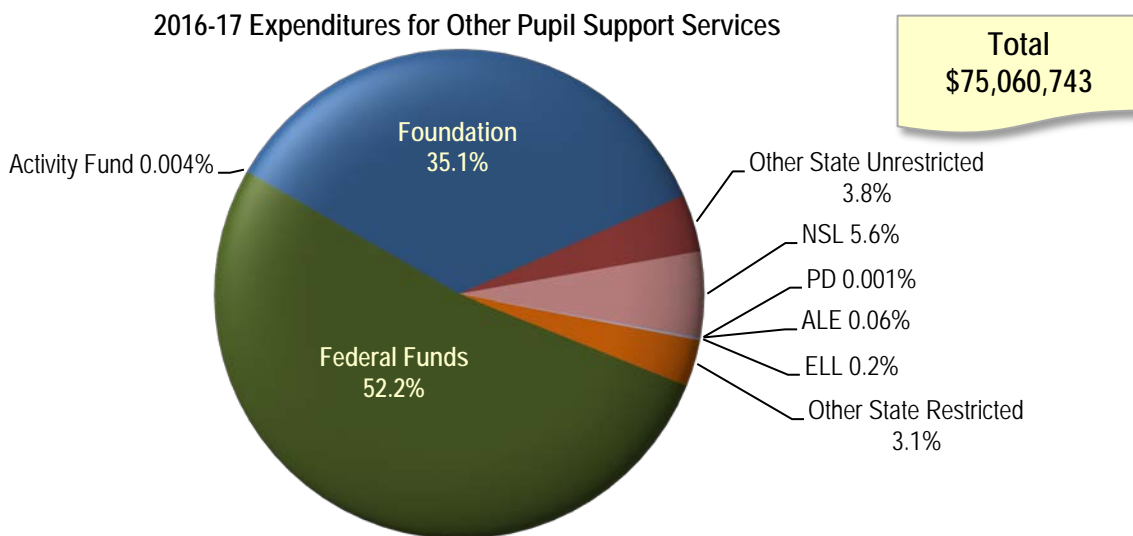
- Psychological testing
- Physical and occupational therapy
- Supervision of psychological services

In each of these areas, small districts relied exclusively on contracted services. None of the small districts recorded any employee expenditures, while large districts relied more heavily on employees to provide services in these areas.

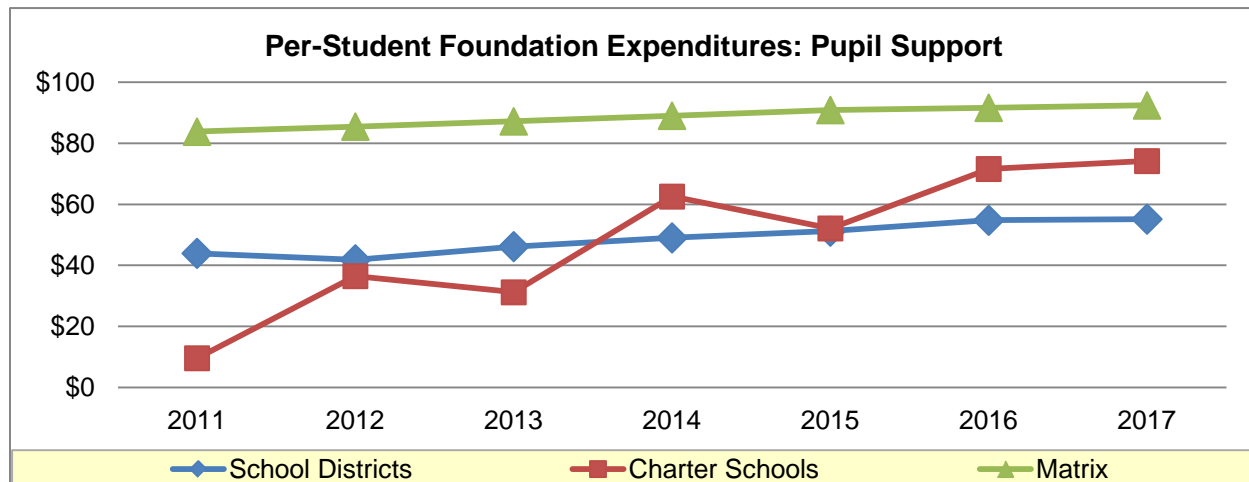
High-poverty districts spent a little more than 20% of the amount of foundation funding per student that the lowest poverty group spent, but high-poverty districts spent more total funding per student on student support services. This suggests that high poverty groups may have spent less foundation funding because they had other sources of funds to use for this purpose.

There was very little difference among the districts when grouped by student achievement levels, though the lowest achieving districts spent slightly more than on these services than the other three groups.

The following pie chart shows the proportion of each funding type used to cover all pupil support expenditures. Districts and charter schools used foundation funding to cover just over a third of these expenditures. Districts used federal funds to cover more than half of their student support expenditures.



The following graph shows the per-student expenditures for pupil support services from foundation funding between 2011 and 2017. Traditional school districts typically spent well below the matrix funding level, while charter schools' per-student expenditures have increased significantly in recent years. This increase reflects a rise in the enrollment of special education students in charter schools. Special education students—ages 5-21—made up about 5.4% of total enrollment in 2011, compared with about 9.2% in 2017. The most significant increases in charter schools' overall per-student expenditures (not just foundation funding expenditures) were for speech pathology services. The overall per-student expenditures for speech pathology increased about 68% between 2011 and 2017. Other charter school expenditure increases occurred in parental involvement and student accounting.



**STATE RANKING: STAFFING AND EXPENDITURES**

NCES provides data on the number of student support staff in each state. Under the NCES definition, employees who provide student support services are staff “whose activities are concerned with providing non-instructional services to students.” Staff in this category include attendance officers; staff providing health, psychology, speech pathology, audiology, or social services; as well as the supervisors of these employees and of transportation and food service workers. Student support staff may be most comparable to what this report has included as Arkansas’s nurse and pupil support staff. The most recent data available for all states are from 2015-16. According to the NCES data, Arkansas had a total of 7.81 student support services staff per 500 students in 2015-16. (The enrollment data used to calculate the student support services staff per 500 students and expenditures per student include pre-K students who have been excluded from the BLR’s foundation funding analysis elsewhere in this report.)

Number of Student Support Staff	
National Average	3.37 per 500 students
Arkansas	7.81 per 500 students

	Student Support Staff: Arkansas’s Rank
All States and Washington D.C. (51)	4 <sup>th</sup> highest
SREB States (16)	1 <sup>st</sup>
Surrounding States (7, including AR)	1 <sup>st</sup>

NCES also provides data on total student support services in each state. These services “include attendance and social work, guidance, health, psychological services, speech pathology, audiology, and other student support services,” according to the NCES definition. The most recent data available for all states are from 2014-15. According to the NCES data, Arkansas schools spent \$516 per student on student support staff in 2014-15, compared with \$644 per student nationally.

Student Support Services Expenditures	
National Average	\$644 per student
Arkansas	\$516 per student

	Expenditures for Student Support Services: Arkansas’s Rank
All States and Washington D.C. (51)	35 <sup>th</sup> highest
SREB States (16)	9 <sup>th</sup> highest
Surrounding States (7, including AR)	3 <sup>rd</sup> highest

## SCHOOL-LEVEL ADMINISTRATION PERSONNEL

### PRINCIPALS

Principals serve as the building-level leader, ensuring schools run smoothly and improve student achievement. A school principal provides not only administrative oversight for a school but also instructional leadership. Principals do this “by creating professional communities in which teachers provide considerable instructional leadership, developing professional development opportunities for teachers, signaling that instructional improvement and student achievement are core goals, and helping the school as a whole to take responsibility for student achievement increases or decreases while also managing the non-instructional aspects of the school.”<sup>16</sup>

The state’s accreditation standards require districts to employ at least a half-time principal for every school, and one full-time principal for schools with 300 students or more (15.02). Three schools in 2016-17 were cited for violations related to inadequately licensed principals.

### BACKGROUND: PRINCIPALS IN THE MATRIX

The matrix provides funding for 1.0 FTE principal for every 500 students. This staffing level was established in 2003 based on the recommendation of the General Assembly’s consultants.

In 2003, Picus and Associates recommended 1.0 FTE principal for every 500 students, noting that “all comprehensive school designs, and all prototypic school designs from professional judgment studies around the country include a principal for every school unit.”<sup>17</sup> The General Assembly implemented this recommendation in the matrix formula beginning with the 2004-05 school year. When the consultants were hired again 2006, they noted that the state’s accreditation standards require districts to employ at least a half-time principal (.5 FTE) for every school and one full-time (1.0 FTE) principal for schools with 300 students or more. That would mean that some schools smaller than 500 students would need 1 FTE principal to comply with the standards but would be funded only for a partial FTE principal. Still, the consultants continued to recommend providing funding for one full-time principal for a school of 500 students. They reasoned that the actual salaries paid in smaller schools are typically low enough that the salary provided in the matrix is adequate even for schools with fewer than 500 students. The principal line has included 1.0 FTE principal since that time.

Unlike other salaries discussed previously in this report, the principal salary is not based on the average teacher salary. Instead, the matrix includes a salary and benefits package totaling \$99,012 per principal in 2016-17, or \$198.10 per student. That amount is comprised of the following items:

- Base salary of \$79,631
- Health insurance contribution of \$1,862
- Additional benefits calculated at 22% of the base salary (\$17,519). This is comprised of 14% for state retirement, 6.2% for Social Security, 1.45% for Medicare and .35% for unemployment and workers’ compensation.

The principal salary and benefits package was originally established at \$72,000 in the 2004-05 matrix, but in 2007, the Education Committees determined that the salary package had been set too low due to a miscalculation. Based on evidence presented in 2006, the Committees opted to increase the principal salary and benefits amount by 12.88% from \$76,335 in 2006-07 to \$86,168 in

<sup>16</sup> Odden, A., Picus, L. O., & Goetz, M. (2006). *Recalibrating the Arkansas School Funding Structure*. Report prepared for Arkansas Joint Committee on Education, p. 23.

<sup>17</sup> Odden, A., Picus, L. O., Fermanich (2003). *An Evidence-based Approach to School Finance Adequacy in Arkansas*. Report prepared for the Arkansas Joint Committee on Education Adequacy, p. 22.

2007-08. The salary has received an annual increase each year between 2008-09 and 2014-15 as the foundation funding rate received annual cost of living adjustments. However, the principal line of the matrix has not received any increase for FY16 through FY19.

Act 743 of 2017 set the per-student foundation funding rate to include no increase for principals. While the salary and benefits package has remained unchanged, since 2014-15 (\$99,012), the base salary within that package has declined slightly due to an annual increase in the required district payment for health insurance.

	2018	2019
Per-Student Rate	\$198.10	\$198.10
% Change	0%	0%

**ACTUAL STAFFING PATTERNS AND SALARIES**

The following table shows the number of schools (including charter schools) with fewer than 300 students, where a half-time principal is required, and those with 300 or more students, which require a full-time principal. The table indicates that the state’s public schools would need a minimum of 887.5 FTE principals to meet the state accreditation standards. Districts and charter schools received funding to support about 945 principals statewide. In 2016-17, districts and charters schools employed about 1,016 FTE principals using all funding sources (not just foundation funding).

School Size	# of Schools in 2017	Principals Required Per School	Total Principals Required
Under 300	315	0.5	157.5
300+	730	1.0	730
<b>Totals</b>	<b>1,045</b>		<b>887.5</b>

The actual number of principals districts employed using foundation funding is nearly the same as the staffing level established in the matrix. The following table compares the two.

Principals			
	Matrix FTE Number Per 500	Districts: Foundation Paid Staff Per 500	Charters: Foundation Paid Staff Per 500
2013-14	1.0	0.99	0.99
2014-15	1.0	1.00	0.89
2016-16	1.0	0.98	0.99
2016-17	1.0	0.97	1.11

Compared with smaller districts, large districts used foundation funding to employ fewer principals per 500 students. This is likely due to the fact that large districts tend to have larger schools, allowing principals to serve greater numbers of students. High-poverty districts also employed more principals than low-poverty districts. This may have more to do with the small size of high-poverty districts than it does with districts’ wealth.

By District Size		
	2016-17 Foundation Paid Staff Per 500	Total Principals Per 500
Small (750 or Less)	1.51	1.79
Medium (751-5,000)	1.07	1.15
Large (5,001+)	0.70	0.80

By Poverty Level		
	2016-17 Foundation Paid Staff Per 500	Total Principals Per 500
Low Poverty (>70%)	0.93	1.01
Medium Poverty (70%-<90%)	1.02	1.14
High Poverty (90%+)	1.21	1.46

Districts and charter schools paid principals a salary that was, on average, about \$2,000 more than what was provided in the matrix.

	Salary in the Matrix	District/Charter Actual Average Salary*
Principal	\$79,631	\$81,692

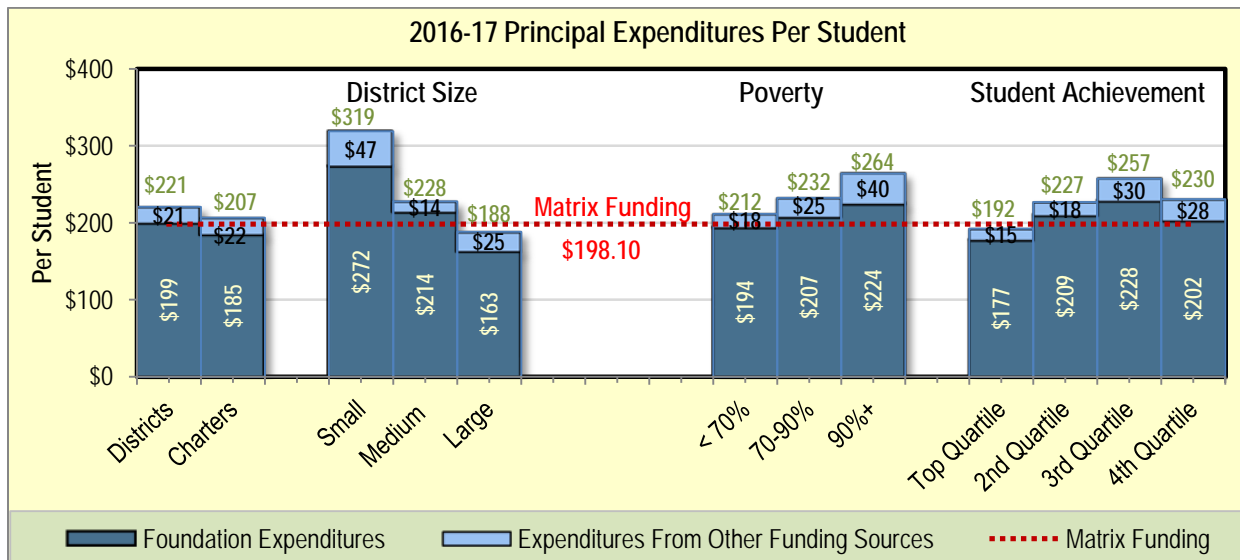
\*Calculated using all funding sources.

### DISTRICT AND CHARTER SCHOOL EXPENDITURES

In 2016-17, districts and charter schools collectively spent \$94.1 million in foundation funding on principal compensation, or about \$199 per student. That’s about \$1 per student more than what the matrix funded.

Principals: Foundation Funding and Expenditures		
	Funding	Expenditures
2015-16	\$93,577,864	\$92,947,167
2016-17	\$93,627,884	\$94,081,965

The following chart compares the per-student spending of traditional school districts and charter schools for principals. It also compares districts’ per-student spending based on district size, poverty level and student achievement.



Districts and charter schools spent similar amounts per student on school principals. While charter schools employed slightly more principals per 500 students (using all funding sources, not just foundation funding), they paid lower salaries than districts. Nine of the 24 charter schools recorded no principals in the APSCN salary report used for this analysis. Nineteen of the 24 charter schools had waivers from the principal requirement.

	Total Principals Per 500 Students (all funding sources)	Average Salary
Districts	1.07	\$82,015
Charters	1.17	\$70,994

Smaller districts spent more foundation funding on principals than larger districts, which is the result of employing more principals per 500 students. Large districts, on average, pay principals significantly higher salaries than small districts pay.

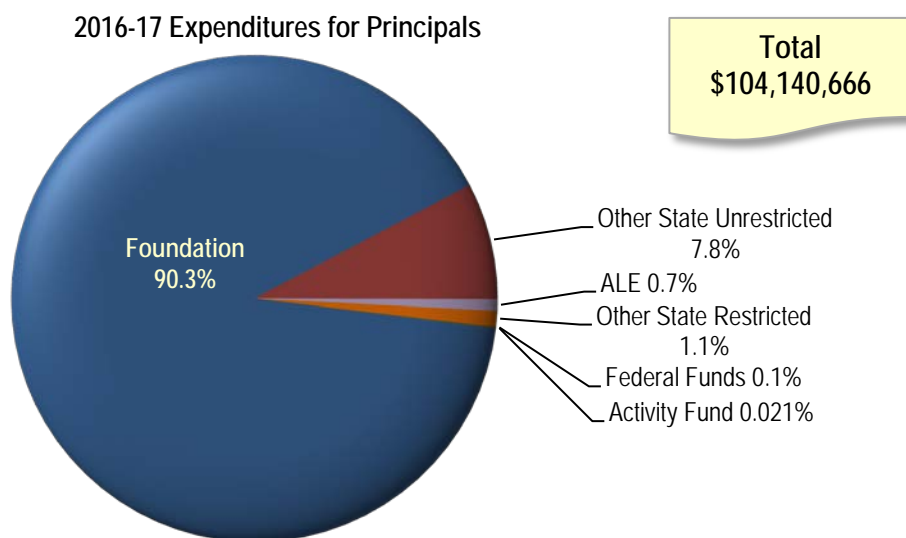
	Total Principals Per 500 Students (all funding sources)	Average Salary
Small	1.79	\$72,055
Medium	1.15	\$79,010
Large	0.80	\$93,164

High-poverty districts spent more per student on principals than districts with lower concentrations of poverty, but the differences were not as significant as they were among districts grouped by size. The higher expenditures per student among high poverty districts is due to employing more people per 500 students.

	Total Principals Per 500 Students (all funding sources)	Average Salary
Low Poverty	1.01	\$82,635
Medium Poverty	1.14	\$81,649
High Poverty	1.46	\$73,353

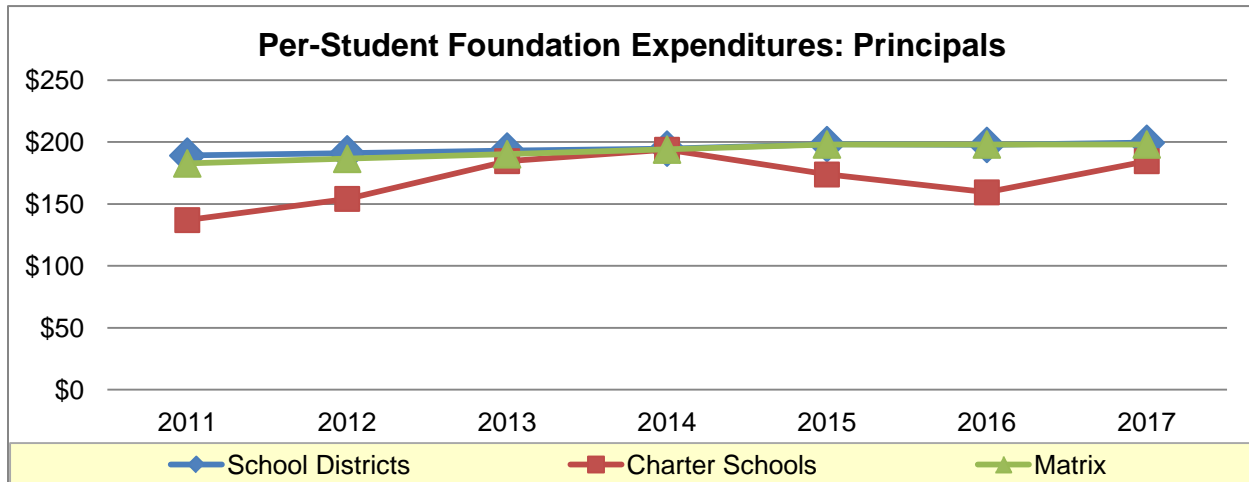
The highest achieving districts tended to spend less foundation funding on principal salaries than the lower achieving districts, but again the differences among student achievement groups were not dramatic.

The pie chart below shows the proportion of each funding type used to cover all principal expenditures. Districts and charter schools primarily use foundation funding to pay for principals.



The following graph shows the per-student expenditures for principals from foundation funding between 2011 and 2017. Generally, districts spent on principals about the same amount they received in foundation funding. Charter schools have tended to spend below the matrix amount in most years, though their spending has been less consistent.





**STATE RANKING: STAFFING AND EXPENDITURES**

NCES provides data on the number of school administrators in each state. This NCES category includes principals, assistant principals, as well as people who supervise school operations and coordinate school instructional activities. The most recent data available for all states are from 2015-16. According to the NCES data, Arkansas had a total of 1.83 FTE school administrators per 500 students in 2015-16, compared with 1.81 school administrators nationally. (The enrollment data used to calculate the number of school administrators per 500 students and the expenditures per student below include pre-K students who have been excluded from the BLR’s foundation funding analysis.)

Number of School Administrators	
National Average	1.81 per 500 students
Arkansas	1.83 per 500 students

	School Administrators: Arkansas’s Rank
All States and Washington D.C. (51)	25 <sup>th</sup> highest
SREB States (16)	10 <sup>th</sup> highest
Surrounding States (7, including AR)	4 <sup>th</sup> highest

NCES also provides data on total school administration expenditures in each state. These expenditures are those “for the office of the principal, full-time department chairpersons, and graduation expenses,” according to the NCES definition. The most recent data available for all states are from 2014-15. According to the NCES data, Arkansas schools spent \$510 per student on school administration expenses in 2014-15, compared with \$632 per student nationally.

School Administration Expenditures	
National Average	\$632 per student
Arkansas	\$510 per student

	Expenditures for School Administration: Arkansas’s Rank
All States and Washington D.C. (51)	43 <sup>rd</sup> highest
SREB States (16)	13 <sup>th</sup> highest
Surrounding States (7, including AR)	5 <sup>th</sup> highest

**SCHOOL-LEVEL SECRETARY**

School clerical personnel perform duties essential for the orderly administration of a school’s day-to-day operation, including record-keeping, answering phones, managing the office, and serving as a liaison to parents. Neither state law nor ADE’s accreditation standards require districts or charter schools to employ any school secretaries.

**BACKGROUND: SCHOOL SECRETARIES IN THE MATRIX**

The matrix provides funding for 1 school secretary for every 500 students. Unlike other salaries discussed previously in this report, the secretary salary is not based on the average teacher salary. Instead, the matrix includes a salary and benefits package totaling \$40,031 per secretary in 2016-17, or \$80.10 per student. That salary amount is comprised of a base salary, health insurance contribution, retirement, Social Security, Medicare, unemployment and workers’ compensation.

The 2003 Adequacy Study conducted by Picus and Associates mentioned clerical staff as a component of the prototypical school’s overall operations and maintenance costs, which the General Assembly translated into a catchall funding line known as the “carry-forward.” (The carry-forward was later broken into three more specific categories of transportation, operations and maintenance and central office costs.) When the consultants were rehired in 2006, they noted that efficient school operations require administrative support and clerical services, even though state accreditation standards do not require schools to employ clerical support. They recommended that 2.0 FTE school secretaries be separated from the carry-forward and included as a separate line in the school-level staffing section of the matrix. The Adequacy Subcommittee agreed that two school secretaries should be broken out of the carry-forward and included in the school-level staffing section of the matrix. However, following the publication of the Adequacy Subcommittee’s final report, the number of school-level secretaries was reduced to one.

The matrix staffing level for clerical support has remained at one secretary position per 500 students since it was established, with inflationary adjustments made to the salary.

In their final report of the 2016 Adequacy Study, the Education Committees recommended increasing the per-student foundation funding rate for school secretaries by 1% for FY18 and for FY19. Act 743 of 2017 set the per-student foundation funding rate to include the following amounts for school secretaries:

	2018	2019
Per-Student Rate	\$80.90	\$81.70
% Change	1%	1%

**STATE RANKING: STAFFING**

NCES provides data on the number of school administrative support staff in each state. According to NCES, these staff “support the teaching and administrative duties of the office of the principal or department chairpersons.” The most recent data available for all states are from 2015-16. According to the NCES data, Arkansas had a total of 2.97 school administrative support staff per 500 students in 2015-16, compared with 2.52 support staff nationally. (The enrollment data used to calculate the number of school administrative support staff per 500 students include pre-K students who have been excluded from the BLR’s foundation funding analysis.)

Number of School Administrative Support Staff	
National Average	2.52 per 500 students
Arkansas	2.97 per 500 students

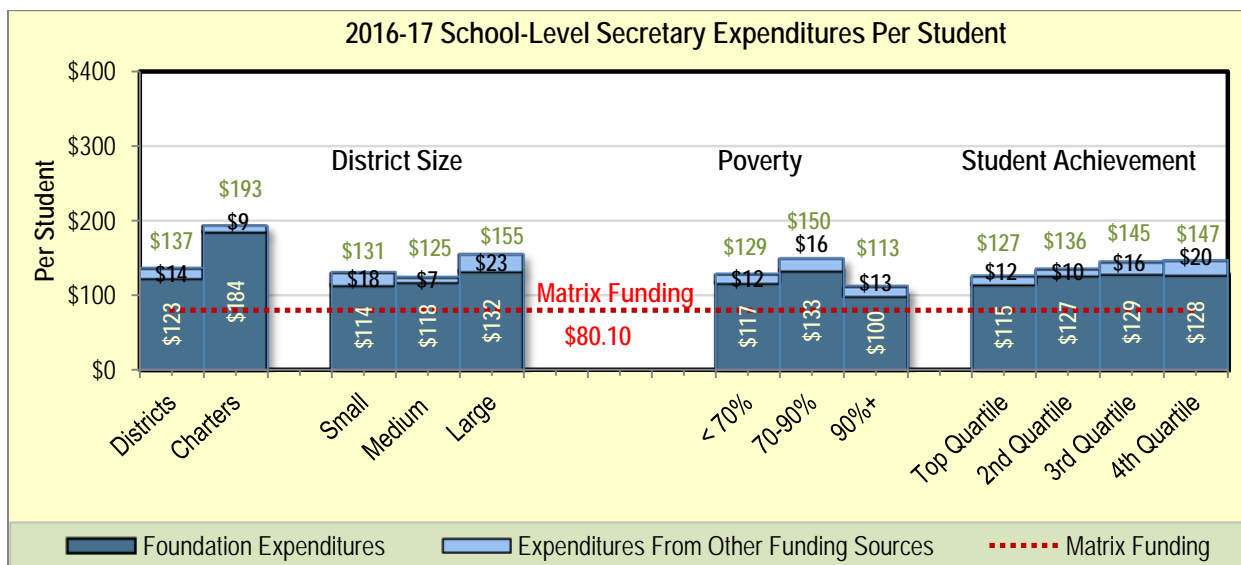
	School Administrative Support Staff: Arkansas's Rank
All States and Washington D.C. (51)	13 <sup>th</sup> highest
SREB States (16)	3 <sup>rd</sup> highest
Surrounding States (7, including AR)	1 <sup>st</sup>

**DISTRICT AND CHARTER SCHOOL EXPENDITURES**

The APSCN system does not allow for easy calculation of the number of school-level clerical support staff funded by foundation funding. However, expenditures can be examined. In 2014-15, districts spent \$57.4 million in foundation funding on school secretary compensation (including benefits), or \$125 per student.

School-Level Secretaries: Foundation Funding and Expenditures		
	Funding	Expenditures
2015-16	\$37,837,390	\$58,439,642
2016-17	\$37,857,615	\$59,019,889

The following chart compares the per-student spending of traditional school districts and charter schools for school secretaries. It also compares districts' per-student spending based on district size, poverty level and student achievement.



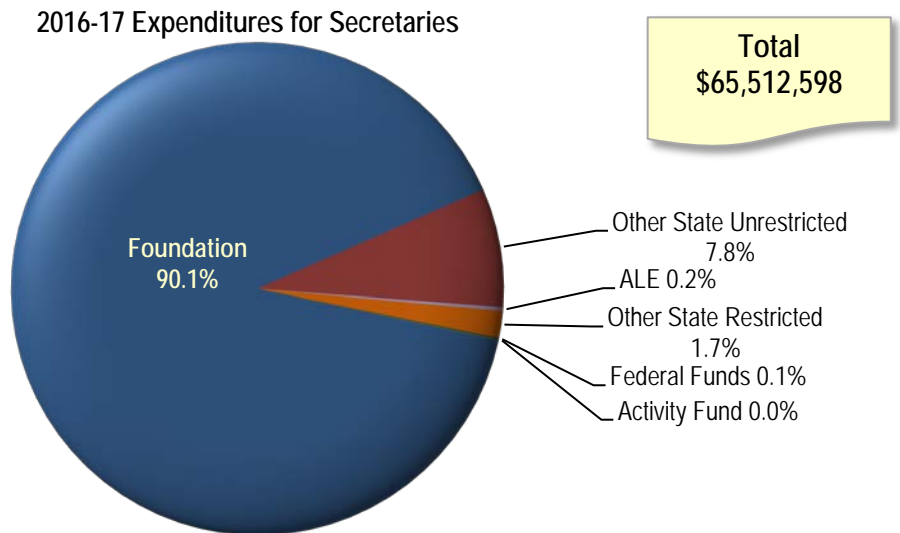
Open-enrollment charter schools spent considerably more foundation funding per student on school-level clerical support than traditional school districts spent. District spending on secretaries did not appear to differ significantly based on district size or student achievement, although large districts had somewhat higher per-student expenditures. High-poverty districts had the lowest per-student expenditures of the three poverty-level groups, while mid-level poverty districts had the highest per-student expenditures for school-level salaries.

Districts and charter schools paid secretaries a salary that was, on average, about \$4,250 less than what was provided in the matrix.

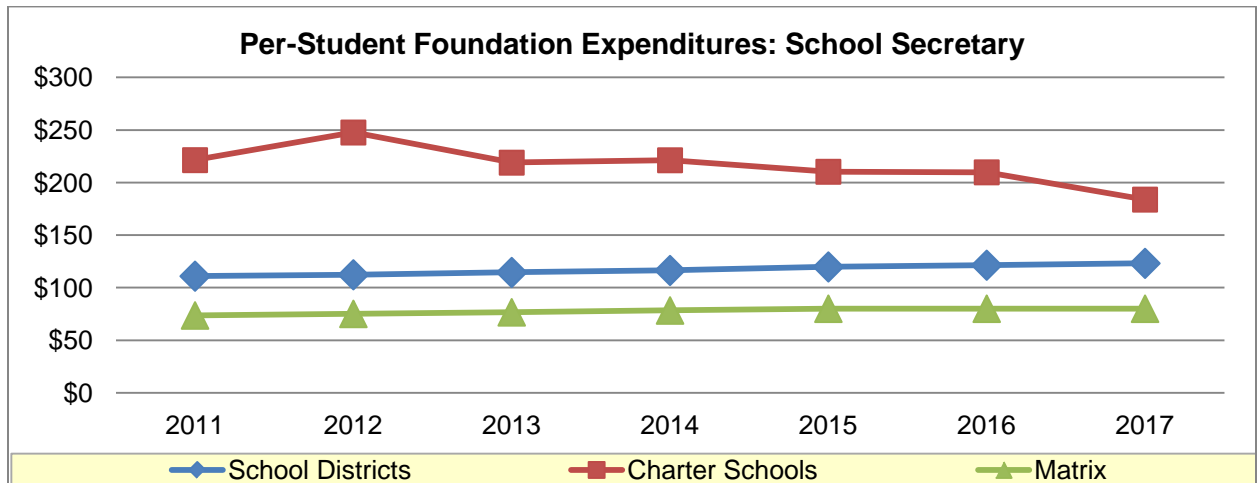
	Salary in the Matrix	District/Charter Actual Average Salary*
Clerical Staff	\$31,286	\$27,028 (includes clerical staff at the central office)

\*Calculated using all funding sources.

The following pie chart shows the proportion of each funding type used to cover all expenditures for school secretaries. Most of the funding districts used to pay for secretaries was foundation funding (90%), but districts also used about \$5.1 million in other state unrestricted funds to pay these salaries.



The following graph shows the per-student school secretary expenditures from foundation funding between 2011 and 2017.

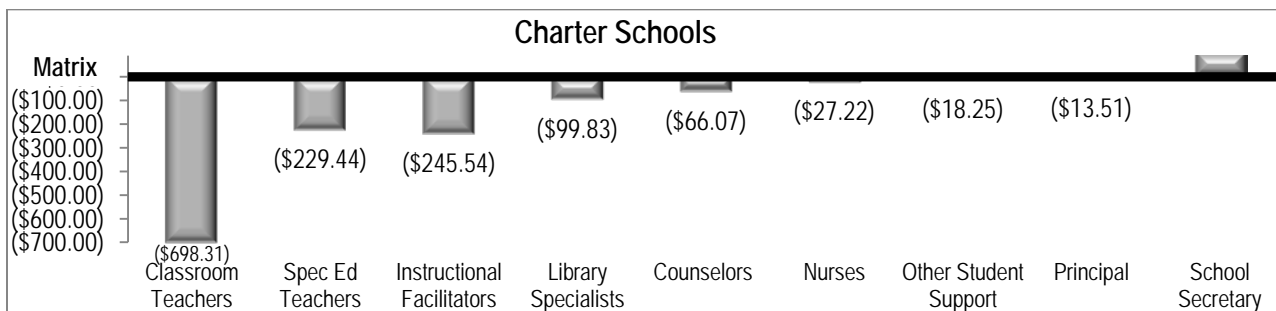
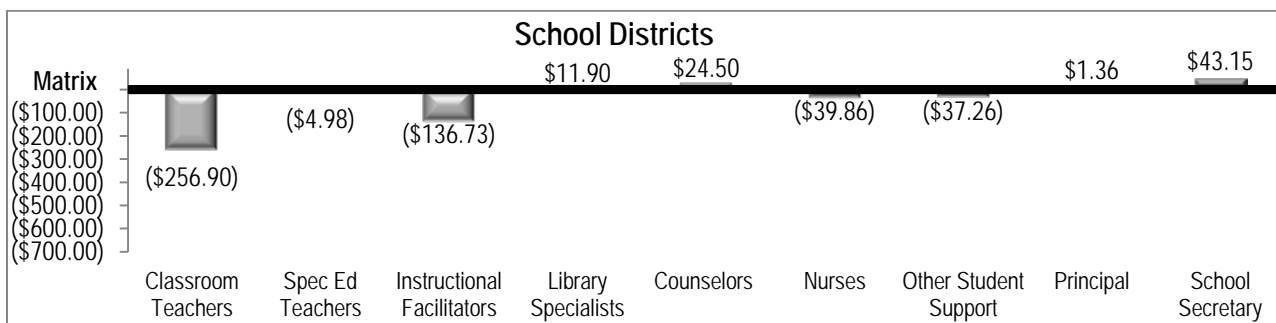


## DISTRICT COMPARISONS

The variety of needs for different districts and their individual student characteristics make it unlikely each matrix line item's funding will fit all schools equally well, which is why districts are not required to spend according to the levels established in the matrix. This study reviewed each line of the matrix in an effort to identify how districts are using these resources. The following charts compare the way districts of different sizes, poverty levels, and achievement levels use foundation funding to address the needs of their students. The charts below each of the tables also show how district and charter spending of foundation funding compares with the matrix. The black line in the charts represents the matrix funded level and the positive and negative amounts provide the foundation funding expenditures per student above and below the matrix amount for each district grouping.

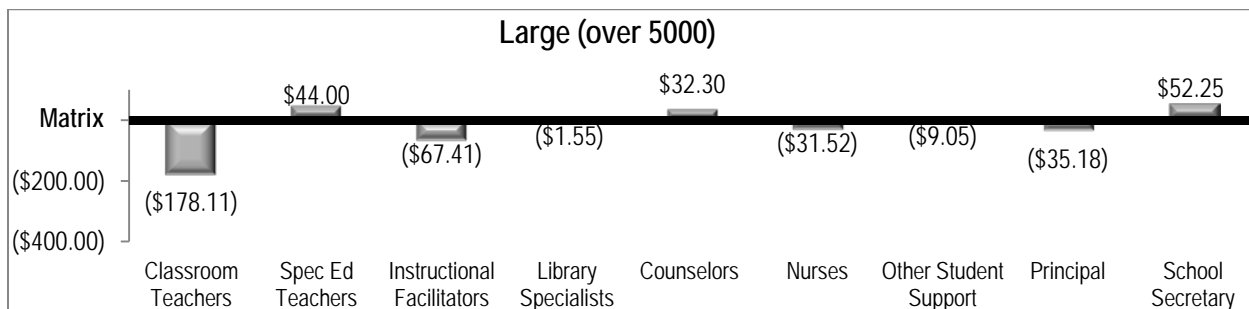
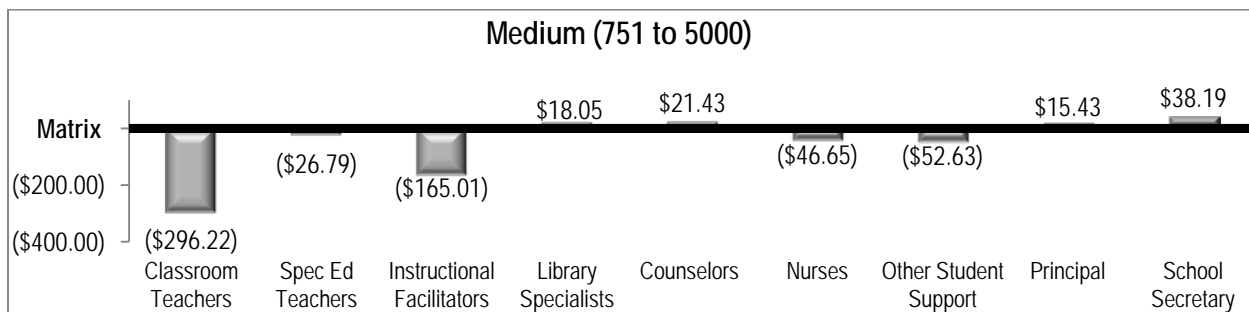
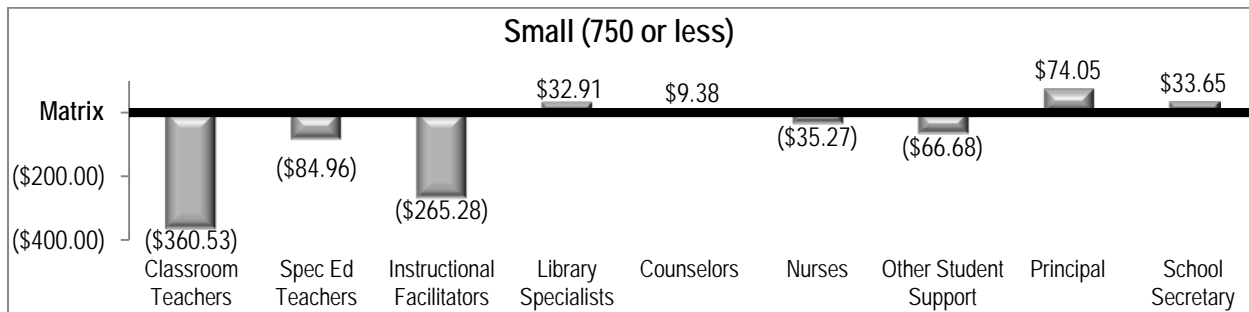
### DISTRICTS AND OPEN-ENROLLMENT CHARTER SCHOOLS

	Matrix	Traditional Districts	Charter Schools
Classroom Teachers	\$3,202.10	\$2,945.20	\$2,503.79
Special Education Teachers	\$372.34	\$367.36	\$142.90
Instructional Facilitators	\$320.98	\$184.25	\$75.44
Library Media Specialists	\$109.13	\$121.03	\$9.30
Counselors and Nurses	\$320.98	\$268.36	\$209.44
Principal	\$198.10	\$199.46	\$184.59
School-level Secretary	\$80.10	\$123.25	\$183.90
Technology	\$250.00		
Instructional Materials	\$183.10		
Extra Duty Funds	\$64.90		
Supervisory Aides	\$50.00		
Substitutes	\$69.00		
Operations & Maintenance	\$664.90	\$842.02	\$814.61
Central Office	\$438.80	\$370.13	\$928.75
Transportation	\$321.20	\$311.80	\$107.60
Other Non-Matrix Items	\$0		
<b>TOTAL</b>	<b>\$6,646</b>		



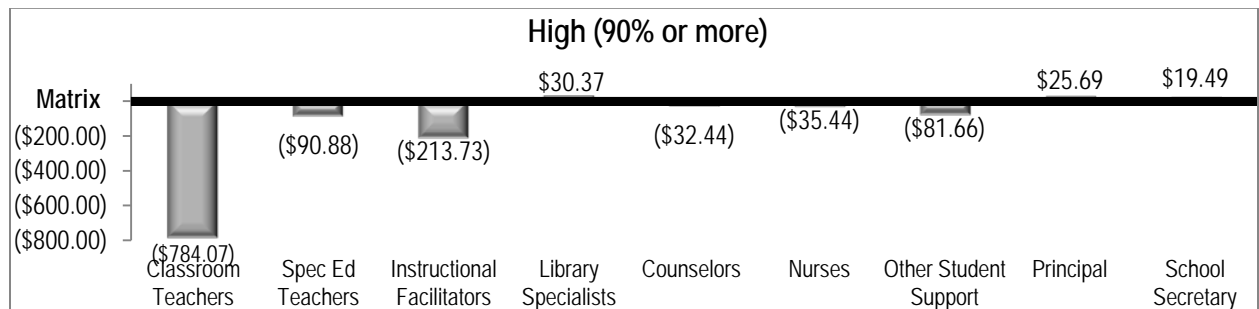
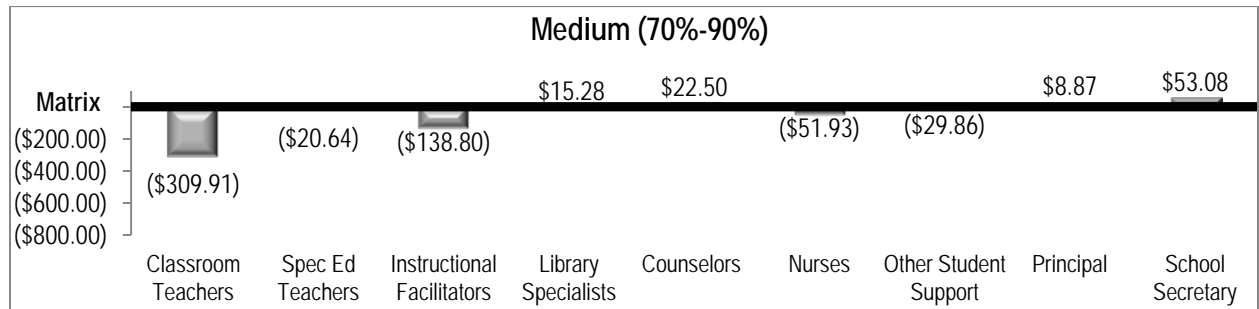
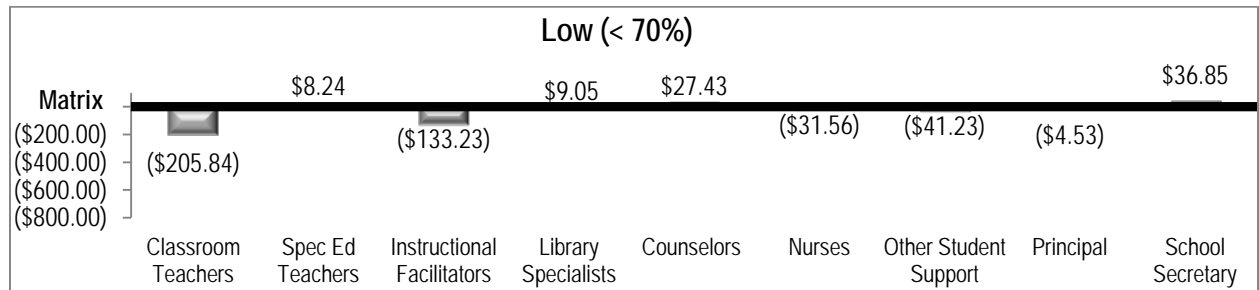
DISTRICT SIZE

	Matrix	Small (750 or less)	Medium (751 to 5000)	Large (over 5000)
Classroom Teachers	\$3,202.10	\$2,841.57	\$2,905.88	\$3,023.99
Special Education Teachers	\$372.34	\$287.38	\$345.55	\$416.34
Instructional Facilitators	\$320.98	\$55.70	\$155.97	\$253.57
Library Media Specialists	\$109.13	\$142.04	\$127.18	\$107.58
Counselors and Nurses	\$320.98	\$228.41	\$243.14	\$312.71
Principal	\$198.10	\$272.15	\$213.53	\$162.92
School-level Secretary	\$80.10	\$113.75	\$118.29	\$132.35
Technology	\$250.00			
Instructional Materials	\$183.10			
Extra Duty Funds	\$64.90			
Supervisory Aides	\$50.00			
Substitutes	\$69.00			
Operations & Maintenance	\$664.90	\$919.03	\$852.29	\$809.74
Central Office	\$438.80	\$522.51	\$393.67	\$301.79
Transportation	\$321.20	\$343.43	\$319.51	\$293.71
Other Non-Matrix Items	\$0			
<b>TOTAL</b>	<b>\$6,646</b>			



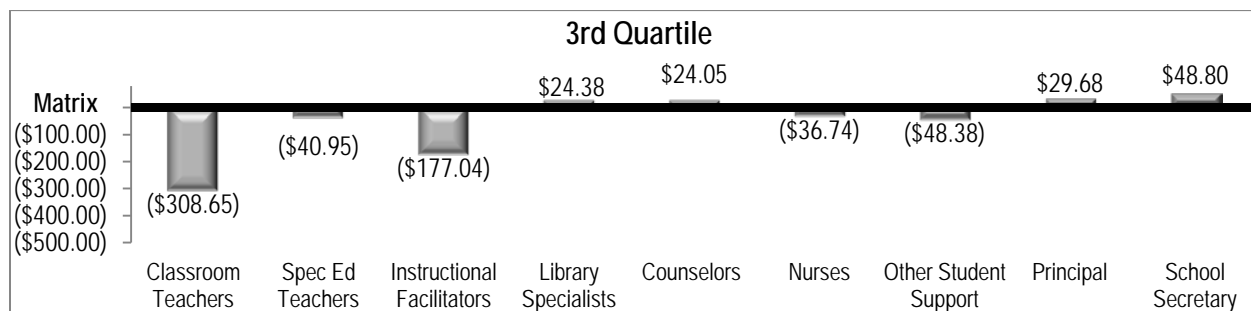
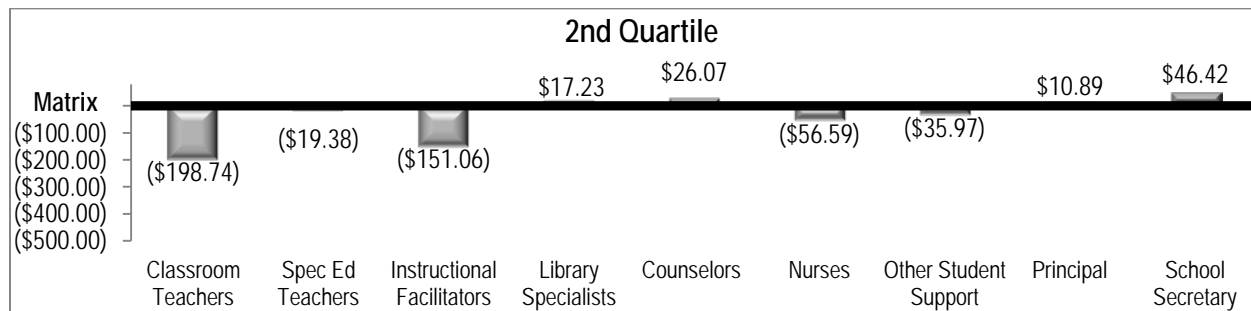
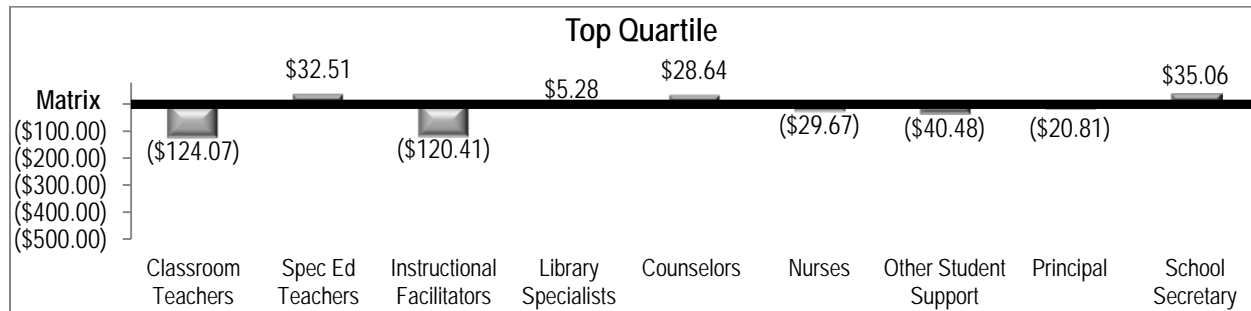
**POVERTY LEVEL**

	Matrix	Low (< 70%)	Medium (70%-90%)	High (90% or more)
Classroom Teachers	\$3,202.10	\$2,996.26	\$2,892.19	\$2,418.03
Special Education Teachers	\$372.34	380.58	351.70	281.46
Instructional Facilitators	\$320.98	187.75	182.18	107.25
Library Media Specialists	\$109.13	118.18	124.41	139.50
Counselors and Nurses	\$320.98	275.62	261.69	171.44
Principal	\$198.10	193.57	206.97	223.79
School-level Secretary	\$80.10	116.95	133.18	99.59
Technology	\$250.00			
Instructional Materials	\$183.10			
Extra Duty Funds	\$64.90			
Supervisory Aides	\$50.00			
Substitutes	\$69.00			
Operations & Maintenance	\$664.90	\$801.77	\$886.15	\$1,194.94
Central Office	\$438.80	\$352.77	\$384.34	\$647.70
Transportation	\$321.20	\$304.83	\$317.59	\$421.02
Other Non-Matrix Items	\$0			
<b>TOTAL</b>	<b>\$6,646</b>			

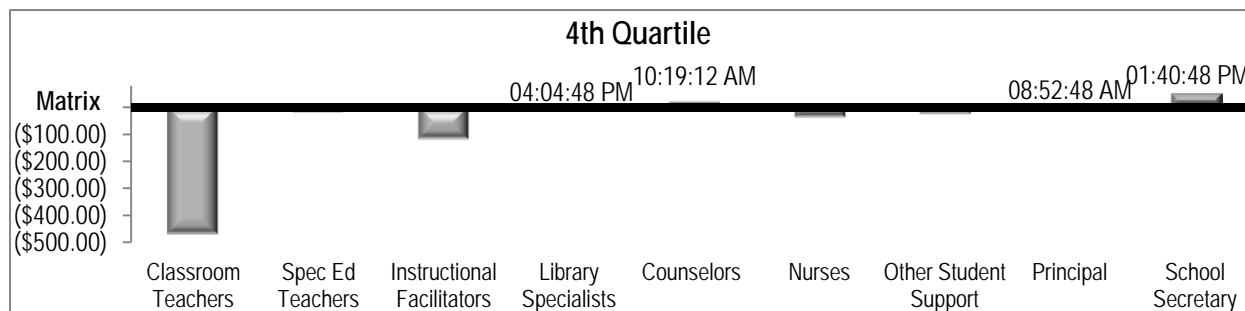


STUDENT ACHIEVEMENT

	Matrix	Top Quartile	2nd Quartile	3rd Quartile	4th Quartile
Classroom Teachers	\$3,202.10	\$3,078.03	\$3,003.36	\$2,893.45	\$2,735.24
Special Education Teachers	\$372.34	\$404.85	\$352.96	\$331.39	\$352.60
Instructional Facilitators	\$320.98	\$200.57	\$169.92	\$143.94	\$202.23
Library Media Specialists	\$109.13	\$114.41	\$126.36	\$133.51	\$116.80
Counselors and Nurses	\$320.98	\$279.47	\$254.49	\$259.91	\$271.92
Principal	\$198.10	\$177.29	\$208.99	\$227.78	\$202.47
School-level Secretary	\$80.10	\$115.16	\$126.52	\$128.90	\$127.67
Technology	\$250.00				
Instructional Materials	\$183.10				
Extra Duty Funds	\$64.90				
Supervisory Aides	\$50.00				
Substitutes	\$69.00				
Operations & Maintenance	\$664.90	\$769.45	\$865.39	\$875.34	\$899.33
Central Office	\$438.80	\$322.31	\$344.27	\$414.54	\$433.19
Transportation	\$321.20	\$279.87	\$275.65	\$347.93	\$368.02
Other Non-Matrix Items	\$0				
<b>TOTAL</b>	<b>\$6,646</b>				







**OVERVIEW: FTES AND AVERAGE SALARIES**

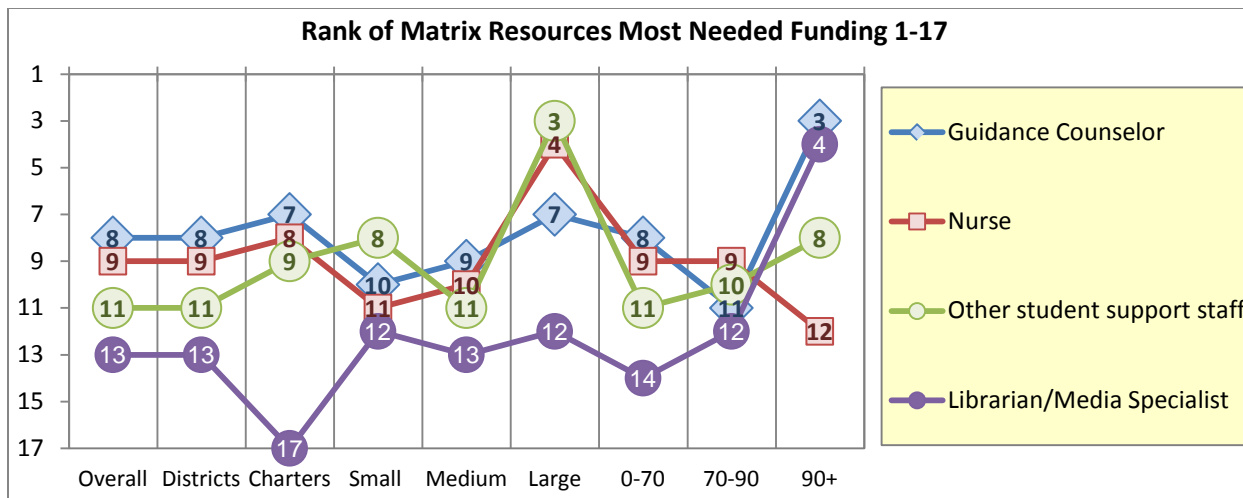
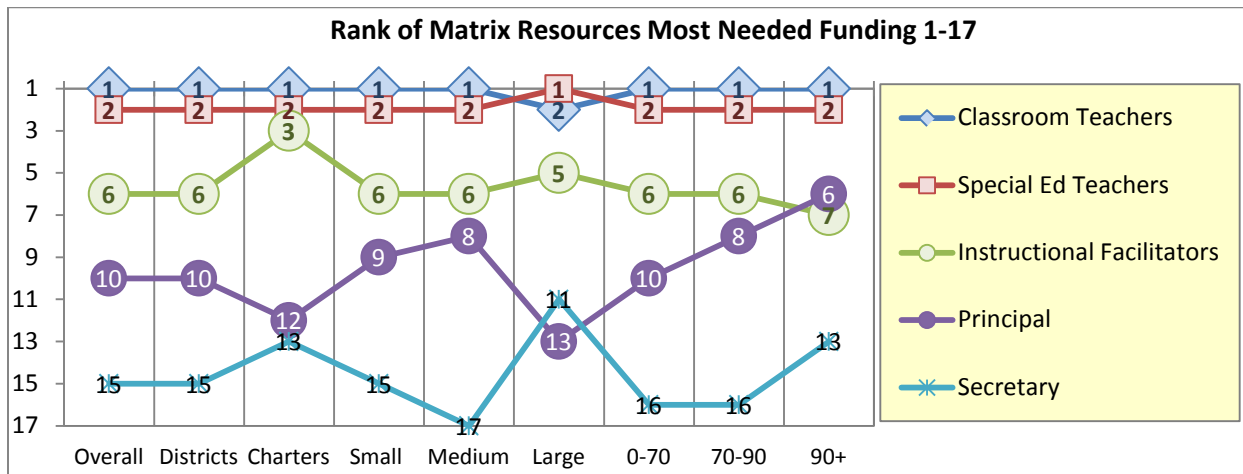
The following table provides the amount of FTEs and the base salary provided by the matrix for each school-level staffing position. For comparison, the table also provides the number of FTEs per 500 students that districts and charter schools employed using foundation funding as well as the average salaries they paid (calculated using all funding sources).

	Matrix FTEs	Actual Foundation Paid FTEs	Matrix Salary	Actual Average Salary
Classroom teachers	24.94	24.81	\$51,093	\$47,978
Special education teachers	2.90	2.94	\$51,093	\$49,278
Instructional facilitators	2.00	0.38	\$51,093	\$61,344
Assistant principals	0.50	0.73	\$51,093	\$73,865
Librarian	0.85	0.88	\$51,093	\$54,010
Guidance counselor	1.11	1.15	\$51,093	\$57,357
Nurse	0.67	0.48	\$51,093	\$35,601
Other pupil support	0.72	0.20 (does not include contracted pupil support)	\$51,093	varies depending on position
Principal	1.00	0.97	\$79,631	\$81,692
Secretary	1.00	Not available at the school level	\$31,286	\$27,028 (includes clerical staff at the central office)

**DISTRICT SURVEY RESPONSES**

As part of the 2018 Adequacy Study, the BLR conducted surveys of all 235 school district superintendents and the directors of the 24 open-enrollment charter schools operating in 2017-18. The survey was conducted using an online questionnaire. The survey was distributed to the districts beginning October 6, 2017, and the last district responded January 24, 2018. The survey allowed the BLR to collect opinions from superintendents as well as specific, quantitative data not available through other sources. To elicit the most candid responses, district staff were assured their answers would not be individually identified, therefore responses are provided only in aggregate.

**Superintendent Survey Question:** Rank the resources in the matrix in terms of areas where your district most needs additional funding (of any amount), with 1=MOST in need of additional funding and 17=LEAST in need of additional funding.



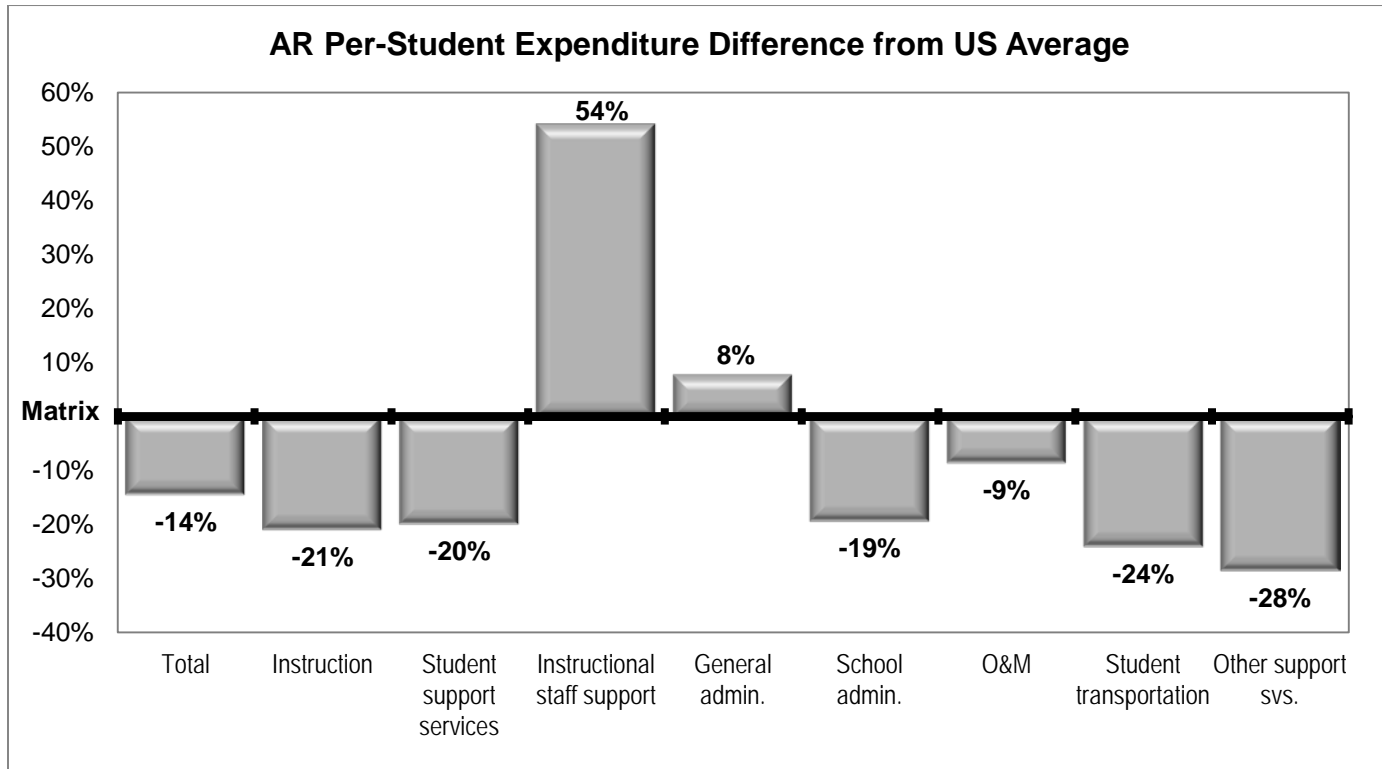
Almost without exception, the various groups of districts and charter schools ranked classroom teachers and special education teachers as the areas of the matrix most in need of additional foundation funding. Instructional facilitators also ranked fairly high with most groups ranking this staffing position as the 6<sup>th</sup> or 7<sup>th</sup> highest funding need. Charter schools ranked instructional facilitators even higher.

While most district groups ranked the need for more funding for librarians fairly low and guidance counselors as a mid-level need, high poverty districts ranked these needs among their highest. High poverty districts also tended to prioritize funding for principals above where other district groups ranked principals.

Large districts ranked school nurses and other student support services as a higher funding need compared with the way other district groups ranked those staffing categories. Large district also ranked funding for school principals as a lower funding need, compared with other district groups' ranking.

**NATIONAL COMPARISON**

The following bar chart shows how Arkansas’s per student spending compares with the national average. The chart covers the services addressed in this report: general (district) administration, operations & maintenance and student transportation. The other items in the chart will be addressed in upcoming reports.



**Instruction** expenditures for “activities related to the interaction between teachers and students,” including “salaries and benefits for teachers and teacher aides, textbooks, supplies, and purchased services. These expenditures also include expenditures relating to extracurricular and cocurricular activities.”

**Student support services** expenditures for services including “attendance and social work, guidance, health, psychological services, speech pathology, audiology.”

**Instructional staff support** expenditures for “activities that include instructional staff training, educational media (library and audiovisual), and other instructional staff support services.”

**General administration** expenditures for the “board of education and superintendent’s office for the administration of LEAs, including salaries and benefits for the superintendent, the school board, and their staff.”

**School administration** expenditures for the “office of the principal, full-time department chairpersons, and graduation expenses.”

**Operation and maintenance** expenditures are those for “the operation of buildings, the care and upkeep of grounds and equipment, vehicle operations (other than student transportation) and maintenance, and security.”

**Student transportation services** expenditures are those for vehicle operation, monitoring, and vehicle servicing and maintenance associated with transportation services. Expenditures for purchasing buses are reported under equipment.

**Other support services** expenditures are those “for business support services (activities concerned with the fiscal operation of the LEA), central support services (activities, other than general administration, which support each of the other instructional and support services programs, including planning, research, development, evaluation, information, and data processing services).”

## CONCLUSION

A major objective of the biennial Adequacy Study is to examine how schools have spent the foundation funding they have received to ensure that funding levels adequately meet their needs. The foundation funding formula, known as the matrix, is designed to determine the amount of funding needed to cover the necessary components of an adequate education. However, foundation funding is unrestricted, meaning districts and charter schools can spend this money in whatever way best fits their needs. Districts and charter schools are not required to mirror their spending patterns on the funding levels in the matrix. This report described the amount of foundation funding provided to districts and open enrollment charter schools for each school-level staffing component of the matrix and the extent to which the funding met districts’ and charter schools’ needs as measured by their expenditures.

It is important to remember that while foundation funding is a major source of funding for school districts, it makes up only about 56% of districts’ and charter schools’ total funding (55% for traditional districts and 66% for open enrollment charter schools). Because school districts and charter schools receive, on average, 44% of their funding from other sources, they have a variety of options for determining which type of funding to use for each resource funded by the matrix.

This report builds on a report presented to the Education Committees last month examining expenditures for district-level resources. That report was the first of three Resource Allocation reports. Next month’s report will examine expenditures for school-level resources.

Districts’ actual foundation funding expenditures in 2016-17 tracked fairly closely with the intent of the matrix in some areas and less well in other areas.

### Expenditures By Districts and Charter Schools

The analysis in this report found that traditional school districts spent more foundation funding than the matrix provided for library media specialists, counselors and school-level secretaries and less than the matrix provided for classroom teachers, instructional facilitators/assistant principals, nurses and other student support. Traditional districts spent roughly the matrix amount for special education teachers and for principals. Charter schools spent less foundation funding than the matrix amount for all school-level staff positions except school-level secretaries.

When comparing the spending patterns of traditional districts and charter schools, it appears that traditional school districts spent more foundation funding per student than open enrollment charter schools in all areas of school-level staffing except school nurses, pupil support (psychologist, social workers, speech pathologists, etc.), and school secretaries. Districts’ higher per-student expenditures in most school-level staffing components result from the fact that traditional districts paid higher salaries than charter schools for every school-level position where a salary could be calculated. Compared with charter schools, districts also employed more staff per 500 students in every school-level position, except classroom teachers and principals.

### Expenditures By Size

All district size groups spent less foundation funding per student than the matrix provided for classroom teachers, instructional facilitators/assistant principals, school nurses and pupil support staff. All groups spent more than the matrix provided for counselors and school-level secretaries. Small and medium districts spent less than the matrix level for special education teachers and more than the matrix level for librarians and principals; while large districts spent more on special education teachers and less on principals.

When comparing the spending patterns of districts based on their size, it appears that while large districts spent less per student than smaller districts on district-level resources (maintenance and operations, transportation and central office), large districts tended to spend *more* per student on school-level staffing. This suggests that large districts may be able to direct any savings they achieve in non-instructional areas of operations, such as transportation and maintenance, into attracting and retaining school-level instructional and support staff.

Large districts' higher per-student expenditures for school-level staffing resulted from the higher salaries large districts tended to pay for all staff positions. The higher salaries led to greater per-student spending despite the fact that large districts employed fewer staff per 500 students.

There were two areas in which large districts spent less foundation funding per student than smaller districts: librarians and principals. The lower expenditures may be due to the fact that the accreditation standards require staffing levels for these positions based on the number and size of existing schools in a district, rather than on a district-wide staff to student ratio. For those positions, the additional staff per 500 students in smaller districts eliminated any cost reductions they achieved by paying lower salaries.

### **Expenditures By District Poverty Levels**

Compared with the matrix funding level, all three of the district poverty groups spent less foundation funding per student than the matrix for classroom teachers, instructional facilitators/assistant principals, nurses and principals. All three district poverty groups spent *more* than the matrix funding level for library media specialists and school secretaries.

When comparing the groups based on poverty, high poverty districts spent considerably less foundation funding per student than low poverty groups for most school-level staffing. However, high poverty districts spent more foundation funding per student than low poverty districts for library media specialists and principals. The typically lower foundation funding expenditures for high poverty districts result from the fact that high poverty districts have greater amounts of other funding (e.g., Title I and NSL state categorical funds) they can use to pay for certain resources. When considering all school staffing expenditures made using all types of funds, high poverty districts actually spent more per student than low poverty districts for every staff position except special education teachers and school secretaries. This overall higher spending pattern results from the fact that high poverty districts employ more staff per 500 students, despite the lower salaries they tend to pay.

### **Expenditures by Student Achievement**

The spending patterns among districts based on student achievement levels are less clear. When considering foundation funding expenditures, the highest achieving districts spent more per student than lower achieving districts. However, when considering all funding sources, the per student expenditures did not follow a clear pattern for classroom teachers or any other types of staff.

### **National Comparisons**

When compared nationally, Arkansas ranks among the top five states in terms of highest staffing ratios for librarians and student support staff (including nurses). The state ranks in the top 20 states in terms of the highest numbers of school administrative staff, guidance counselors, classroom teachers and instructional coordinators. The state ranks in the middle in terms of the number of school administrators and below the middle in terms of library staff support.

In terms of expenditures, Arkansas ranks in the top five in terms of highest spending per student for instructional staff support, which includes professional development and school library expenditures. Arkansas ranks in the lower half of states in terms of student support expenditures (35<sup>th</sup>), instructional salaries—regular programs (39<sup>th</sup>), special education teacher salaries (39<sup>th</sup>), and school administration expenditures (43<sup>rd</sup>).

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ADE—Arkansas Department of Education  
ADM—Average Daily Membership  
ALE—Alternative Learning Environment  
APSCN—Arkansas Public School Computer Network  
ATRS—Arkansas Teacher Retirement System  
BLR—Bureau of Legislative Research  
ELA—English language arts  
ELL—English Language Learner  
FRPL—Free or Reduced Price Lunch  
FTE—Full-Time Employee/Full-Time Equivalent  
IDEA—Individuals with Disabilities Education Act  
IEP—Individualized Education Program  
NCES—National Center for Education Statistics  
NSL—National School Lunch  
PAM—Physical education, art and music  
PD—Professional Development  
O&M/M&O—Operations and Maintenance  
SREB—Southern Regional Education Board  
URT—Uniform Rate of Tax