



Research Report

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

District-Level Resources

March 26, 2018

**Prepared for
THE HOUSE INTERIM COMMITTEE ON EDUCATION
AND THE SENATE INTERIM COMMITTEE ON EDUCATION**

BUREAU OF LEGISLATIVE RESEARCH

One Capitol Mall, 5TH Floor Little Rock, Ark., 72201 (501) 682-1937

**2017-18
Adequacy
Study**

CONTENTS

Introduction	1
Data and Methodology	1
Foundation Funding Expenditures	1
Expenditures From Other Funding Sources.....	2
District and Charter school Employees and Salaries	3
Statute and Standards.....	3
Education Funding in Arkansas	4
Foundation Funding Overview	5
The Matrix	6
Matrix Background	8
Legislative History	8
Matrix: School Size and Grade Distribution.....	9
School Size in Arkansas.....	9
Grade Distribution in Arkansas	10
District-Level Resources	11
The Carry Forward, 2003-2006.....	11
Operations and Maintenance.....	11
Background: Operations and Maintenance in the Matrix.....	11
O&M Staffing.....	13
District and Charter School Expenditures	14
State Ranking: Expenditures	16
Central Office	16
Background: Central Office in the Matrix	17
Central Office Staffing	18
State Ranking: Staffing.....	20
District and Charter School Expenditures	20
State Ranking: Expenditures	23
Transportation	24
Background: Transportation in the Matrix	24
Transportation Staffing	25
District and Charter School Expenditures	25
State Ranking: Expenditures	28
Overview	29
District Comparisons	29
Districts and Open-Enrollment Charter Schools.....	29
District Size	29
Poverty Level.....	30
Student Achievement	30
District Survey Responses.....	31
National Comparison	31
Appendix: Acronyms	33

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 first 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 accreditation standards and adequately educate Arkansas students.

This report is the first 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 first report examines expenditures for district-level resources. Two additional reports will be provided in the coming months to address school-level staffing and school-level resources.

DATA AND METHODOLOGY

This report reviews the basic assumptions of the matrix funding model, including the school size and grade distribution of students, and evaluates how closely today's schools' 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 revenue they can use to pay for matrix items. 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 a percentage. That percentage, individual to each district, was then applied to their expenditures made from those two accounts to determine the portion of expenditures made using foundation funding.

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. The ADM used in this analysis for charter schools is the ADM used to determine each charter school's foundation funding. For some charter schools, the ADM is the prior year number, while for others, it is current year ADM.

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
District Size					
Small (750 or Fewer)	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%
Poverty					
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%
Student Achievement					
Top Quartile	59	2,712	159,995	54.4%	61.1%
2 nd Quartile	58	1,909	110,715	64.0%	51.0%
3 rd 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 funding sources using the following funding 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 a district's students eligible for free or reduced price meals. In 2016-17, districts with less than 70% FRPL-eligible students received \$526 per FRPL student. Those with 70% to less than 90% received \$1,051 per FRPL student, and those with more than 90% received \$1,576 per FRPL student.
- **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 needs funding). These funds are considered restricted because they can be spent only on specified uses.
- **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 Maintenance & Operations (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

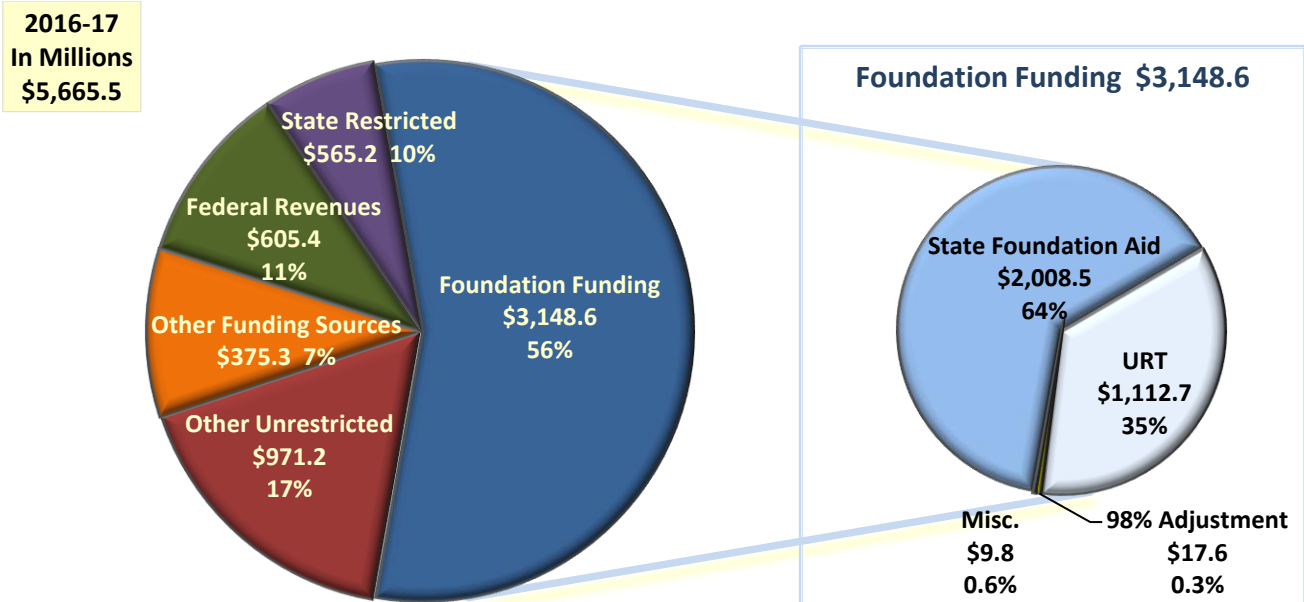
Where available, this report provides information on the numbers of district and charter school employees and salaries included in districts' expenditures (e.g., bus drivers in transportation expenditures). The Arkansas salaries in this report come from APSCN's page 3637 coding structure. The salaries 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 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.

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 relationship of foundation funding revenue to districts' and charter schools' total revenue. The chart demonstrates that a significant amount of additional revenue is available to districts to meet their needs.



- **Foundation Funding** primarily consists of property tax revenues (uniform rate of tax, or 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 state funding such as student growth, declining enrollment, and isolated funding and local revenue sources in excess of URT. 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, 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.

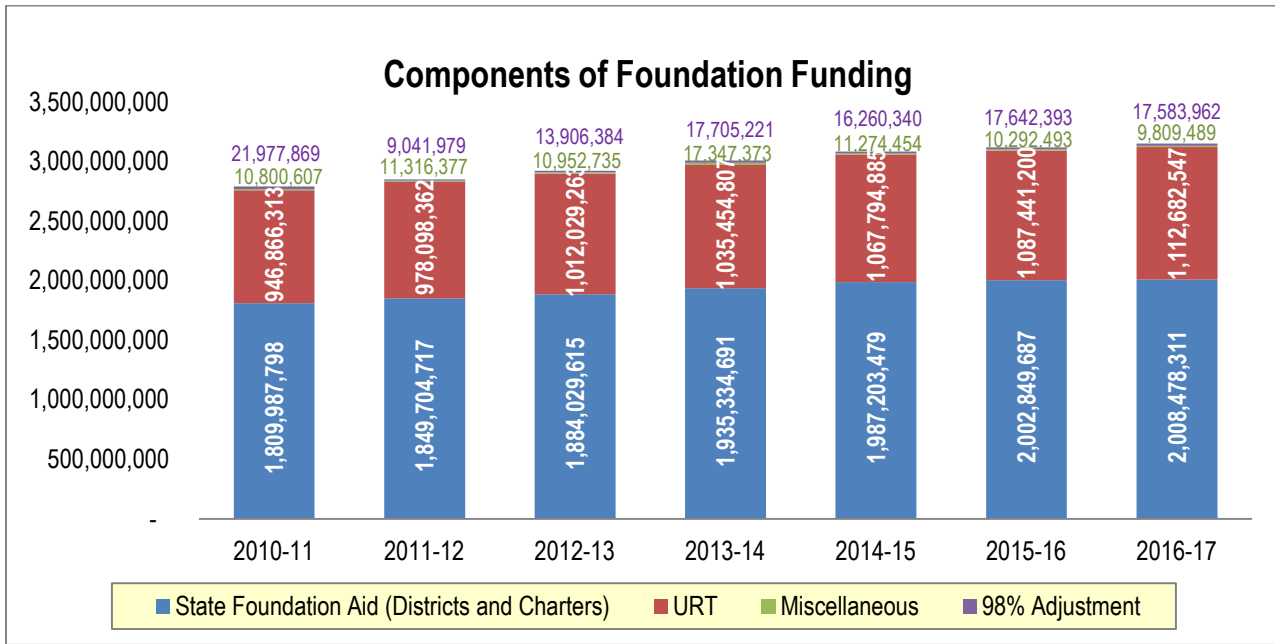
Foundation funding is made up of two main sources of funding: the **uniform rate of tax (URT)** and **state foundation funding aid**. The URT is a constitutionally mandated minimum millage rate (or property tax rate) that school districts must levy at the local level. This rate is set at 25 mills and 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 foundation funding rate 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)].

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.¹ 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.

Foundation Funding Components	District Total	% of Total	Charter Total	% of Total
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%
Total	\$3,064,235,755		\$84,318,554	

The following chart shows the changes over time to the four components making up foundation funding. Since 2011, state foundation aid has consistently made up 64-65% of foundation funding, while URT has made up 34-35%.

¹ 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.



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, its funding would be determined by multiplying \$6,646 by 530 for a total of \$3,522,380.

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.

	Matrix Item	2016-17 FTEs per 500 students
Classroom Teachers	Kindergarten	2.00
	Grades 1-3	5.00
	Grades 4-12	13.80
	Non-Core	4.14
	Subtotal	24.94
Pupil Support Staff	Special Education	2.90
	Instructional Facilitators	2.50
	Library Media Specialist	0.85
	Counselors & Nurses	2.50
	Subtotal	8.75
Administration	Principal	1.00
	Secretary	1.00
	Total	35.69

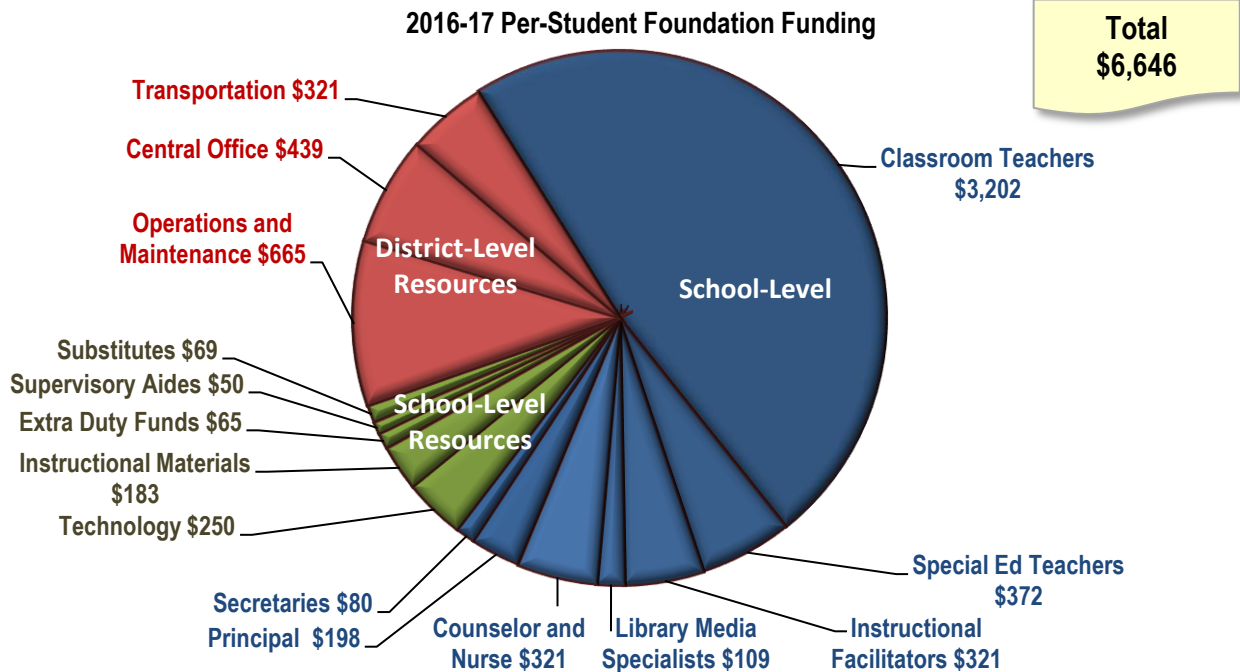
The second section of the matrix specifies the cost of the staff described in the first section of the matrix, as well as the cost of all other needed resources. The matrix is divided into three cost categories:²

- 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.

School-Level Salaries	Salary & Benefits	Per-Student Funding Amt.
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

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

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



² 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.

MATRIX BACKGROUND

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, 2003,³ 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 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' recommendations⁴ and other information, the Subcommittee refined the funding levels established in the matrix,⁵ and in a special session in April 2006, the General Assembly increased the foundation funding rate.

³ 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

⁴ 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>

⁵ Adequacy Study Oversight Subcommittee, A Report on Legislative Hearings For the 2006 Interim Study on Educational Adequacy, Final Report and Recommendations, January 22, 2007

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.⁶

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.

MATRIX: SCHOOL SIZE AND GRADE DISTRIBUTION

The foundation funding matrix was based on the staffing and resources needed to operate a prototypical school of 500 students. This section of the report examines the extent to which the school size and grade levels in the matrix remain appropriate for the current make up of Arkansas schools.

SCHOOL SIZE IN ARKANSAS

The following table shows that 66% of the schools in 2016-17 (including open-enrollment charter schools) have fewer than 500 students, while 34% had 500 or more students. That’s a small change from the school make-up when the matrix was most significantly adjusted in 2006.⁷ That year 71% of schools had fewer than 500 students, and 29% had 500 or more. Overall, schools have been increasing in size over the past 12 years.

School Size: Districts and Charter Schools								
# of Students	Base for Matrix		2014-15		2015-16		2016-17	
	# of schools	%	# of schools	%	# of schools	%	# of schools	%
100 or fewer	58	5%	29	3%	31	3%	24	2%
101-249	229	21%	192	18%	179	17%	189	18%
250-349	228	21%	205	19%	213	20%	207	20%
350-499	271	25%	288	27%	277	27%	273	26%
500 or more	320	29%	340	32%	343	33%	352	34%
Total	1,106		1,054		1,043		1,045	

Note: Percentages do not always add to 100% due to rounding.

Data Source: Enrollment data for 2015, 2016 and 2017 come from ADE Data Center.

⁶ *Lake View Sch. Dist. No. 25 of Phillips County v. Huckabee*, 370 Ark. 139, __ S.W.3d __ (2007).

⁷ 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>

GRADE DISTRIBUTION IN ARKANSAS

An individual school does not typically have grades K-12, but for the purpose of establishing a funding model, the prototypical school of 500 was based on having 40 kindergarten students, 115 students in grades 1-3 (38.3 per grade), and 345 students in grades 4-12 (38.3 per grade). This assumption is necessary because the funding model must account for the different staffing levels required for each of these grade groupings.

While the matrix was designed for schools with 500 students, its assumptions concerning grade distribution for kindergarten through grade 12 can be compared with school districts. The following table shows that 16% of districts in 2016-17 had fewer than 500 students. The average district size in Arkansas was 1,970 students, and the average charter school size was 579 students.

2016-17 District Size				
# of Students	# of Districts	%	# of Charters	%
Fewer than 350	4	2%	15	63%
350-499	33	14%	1	4%
500-999	81	34%	3	13%
1,000-2,499	71	30%	5	21%
2,500-4,999	30	13%	0	0%
5,000 or more	16	7%	0	0%
	235		24	

Data Source: 2016-17 enrollment count, ADE Data Center. Elsewhere in this report, categorizations of districts by student count were based on 2015-16 ADM, not 2016-17 enrollment.

The following tables show that the original matrix assumptions regarding the number of students per grade continues to closely match actual district and charter school data.

Students by Grade								
	Basis for Matrix		2014-15		2015-16		2016-17	
	# of Students	%	# of Students	%	# of Students	%	# of Students	%
Kindergarten	40	8%	37,717	8%	36,584	8%	36,908	8%
Grades 1-3	115	23%	111,652	24%	111,652	24%	113,566	24%
Grades 4-12	345	69%	315,229	68%	315,229	68%	326,086	68%

Data Source: Enrollment Count by Grade, ADE's Data Center

DISTRICT-LEVEL RESOURCES

As mentioned previously, this report provides analysis of one section of the matrix, district-level resources. The other two sections, school staffing and school-level resources, will be covered in two separate reports in the coming months.

THE CARRY FORWARD, 2003-2006

While the original matrix developed in 2003 provided specific funding amounts for the staffing and resources needed for school operations, it did not specify individual funding amounts needed for resources shared districtwide. Instead the 2003 matrix included a line item called the “carry forward” that represented what might be best described as miscellaneous expenditures not otherwise identified in the school staffing or school resources sections of the matrix. In their 2003 report, Picus and Associates, the education consultants hired by the General Assembly, recommended including \$1,152 per student for this carry forward. The funding level was based on districts’ actual expenditures at the time. According to the 2003 report, these were “expenditures that would be ‘carried forward’ unchanged, and included such things as fiscal services, board and legal services, executive administration (superintendent), athletics, facilities and capital other than debt, community services, food services, and other non-instructional services, operations and maintenance, transportation, technology services, certain instructional support such as drug and crime prevention and tuition paid to other local school districts.”⁸

In 2006, the consultants were hired again to, in large part, more precisely identify and quantify the cost of needed district-level resources. The consultants separated the carry forward amount into three line items:

1. Operations and maintenance (O&M),
2. Central office expenses, and
3. Transportation expenses.

These three items have remained in the matrix ever since.

OPERATIONS AND MAINTENANCE

This line of the matrix includes the staff and other resources necessary to maintain school facilities and grounds and keep school buildings clean, heated, and cooled.

BACKGROUND: OPERATIONS AND MAINTENANCE IN THE MATRIX

In 2016-17, the matrix provided districts and charter schools with \$664.90 per student for operations and maintenance. This funding level was originally based on the recommendation of a legislative task force and the findings of a national survey, along with input from the state’s education consultants.

In 2003, as the Joint Adequacy Committee and its education consultants were developing the foundation funding matrix, another legislatively created group, the Task Force to Joint Committee on Educational Facilities, was meeting to address needs specific to school facilities. In November 2004, the Task Force released its final report, which included information on general operations and maintenance cost estimates. The report noted the findings of the 32nd Annual Maintenance and Operations Study conducted by *American School and University Magazine* (2003). That

⁸ 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

national study found that, on average, the cost of school district operations and maintenance is approximately 9% of a district's expenditures. Therefore the Task Force recommended that districts dedicate this amount of their operating expenditures "exclusively for custodial/maintenance operations" and noted that "dedicated funding must be provided" at the cited level.⁹ The report noted that "deferred maintenance is a key element driving the cost of current [facilities] deficiencies and repairs."

The General Assembly then passed Act 1426 of 2005, which included the finding that "in order to satisfy the constitutional expectations of the Arkansas Supreme Court, the state should...[r]equire school districts to conserve and protect their academic facilities in such a manner that the academic facilities remain adequate" (§ 6-21-802(c)(4)). The Act also called for the creation of an Academic Facilities Custodial, Maintenance, Repair, and Renovation Manual and requires the manual to provide standards for the maintenance of school buildings.

Act 1426 also introduced the new requirement that districts spend at least 9% of their foundation funding to pay for utilities, custodial services, maintenance, repair, and renovation activities. Districts that do not spend the required 9% must transfer unspent funds into an escrow account to be used for future O&M expenses (§ 6-21-808(d)). At the end of the 2016-17 school year, all school districts had spent the full 9% on O&M, according to expenditures recorded in APSCN.

In 2006, when the General Assembly rehired Picus and Associates to reexamine the expenditures in the carry forward, the consultants recommended breaking out the carry forward into three components, including operations and maintenance. They recommended providing \$594 per student for O&M to cover custodians, maintenance workers, groundskeepers, maintenance supplies, and utilities.

The Adequacy Subcommittee, however, determined that the consultants' recommendations were based on costs in higher priced geographical areas of the country and on more duties than are required in Arkansas. The House and Senate Interim Committees on Education asked the Academic Facilities Oversight Committee to study the issue further. The Facilities Oversight Committee then recommended setting the O&M funding at 9% of the foundation funding rate to mirror the statute established by Act 1426 of 2005. This amount included funding to support a director of operations and maintenance and a secretary.

Insurance

In addition to the 9% for O&M, the 2006 Adequacy Subcommittee also recommended providing \$27 per student for property insurance. The amount for property insurance was derived through a calculation made in January 2007, when ADE analyzed the total expenditures by school districts for property insurance. The total was divided by the total number of students, with the result being \$27 expended per student. The 2006 Adequacy Subcommittee also recommended that districts be required to spend the \$27 per student only on property insurance. That recommendation never became law, but in 2007, the General Assembly required the Commission for Arkansas Public School Academic Facilities and Transportation to promulgate rules to establish a property insurance requirement (§ 6-21-114(d)(2)(A)). Rule 4.01 of the Division's Rules Governing Property Insurance Requirements requires all school districts to have risk property coverage for school district buildings, structures, and their contents. District property must be insured for at least 90% of the replacement cost to be eligible for state facilities funding assistance. In 2016-17, districts and charter schools collectively spent a little more than \$44 per student on property insurance.

⁹ Arkansas Statewide Educational Facilities Assessment—2004, Final Report to the Joint Committee on Educational Facilities, Nov. 4, 2004, [http://arkansasfacilities.arkansas.gov/public/userfiles/documents/Reports/Final Reports/Final_Report_State_Report_Nov_2004.pdf](http://arkansasfacilities.arkansas.gov/public/userfiles/documents/Reports/Final%20Reports/Final_Report_State_Report_Nov_2004.pdf)

The O&M funding level, therefore, was established to include 9% of foundation, plus the cost of property insurance. When the General Assembly established the O&M funding level in 2006, the overall foundation funding level had not been finalized. The Legislature calculated an O&M amount based on a total foundation funding rate they knew would exceed the final number to make sure the O&M funding level would be at least 9%. The total O&M amount in 2007-08 and 2008-09 was set at \$581 per student, which included \$554 for the 9% of foundation funding and \$27 for property insurance.

In the years since the funding amount was set, the O&M line gradually increased as the foundation funding amount received annual inflationary increases through 2016. In their final report of the 2016 Adequacy Study, the Education Committees recommended increasing the per-student foundation funding rate for operations and maintenance by 1.5% for FY18 and FY19. Act 743 of 2017 increased the per-student foundation funding rate to include following amounts for operations and maintenance:

	2018	2019
Per-Student Rate	\$674.90	\$685.00
% Change	1.5%	1.5%

O&M STAFFING

The state has no required minimum staffing level for operations and maintenance personnel, but the state’s Public School Facilities, Maintenance, Repair and Renovation Manual, maintained by the Division of Public School Academic Facilities and Transportation (Facilities Division), provides the following staffing recommendations:

Operations and Maintenance Position	Recommended Staffing Level
Custodians	1 FTE per 18,000-20,000 square feet
Grounds/General Labor Personnel	1 FTE per 18-20 acres
Maintenance Personnel	1 FTE per 80,000-90,000 square feet

For every 500 students in 2016-17, districts employed nearly five maintenance employees, which may include custodians and grounds personnel. (The APSCN coding system does not distinguish between custodians, grounds personnel and maintenance personnel.) The average salary for a maintenance employee was \$25,434.

Total Maintenance Employees	Average Salary
4,559	\$25,748

	Total FTEs	Number of Districts*	Average Salary
Electricians	39	20	\$43,549
Plumbers	18	11	\$46,236
Painter/Carpenters	77	18	\$40,873

No charters employed these staff.

The square footage of all district buildings statewide totaled more than 100 million square feet. If districts were to meet the custodial and maintenance staff levels recommendations noted in the Facilities, Maintenance, Repair and Renovation Manual, districts and charters would collectively need 6,266 FTEs, or 1,625 more than they employed in 2016-17. These numbers do not include charter schools or services provided through contracted services, but they do include electricians, plumbers and painter/carpenters employed by the districts. The following table shows the maintenance staffing levels of districts when grouped by district size (ADM). Small and medium school districts’ staffing meets about 68% of the recommended levels, while large districts’ staffing meets about 86% of the recommended levels.

	Total Square Feet	Recommended Staffing Levels	Actual Staffing Level	% of Recommended
Small	12,489,888	763	525	68%
Medium	57,008,528	3,484	2,377	68%
Large	33,031,932	2,019	1,739	86%

Other types of O&M employees districts employ include those listed in the following table.

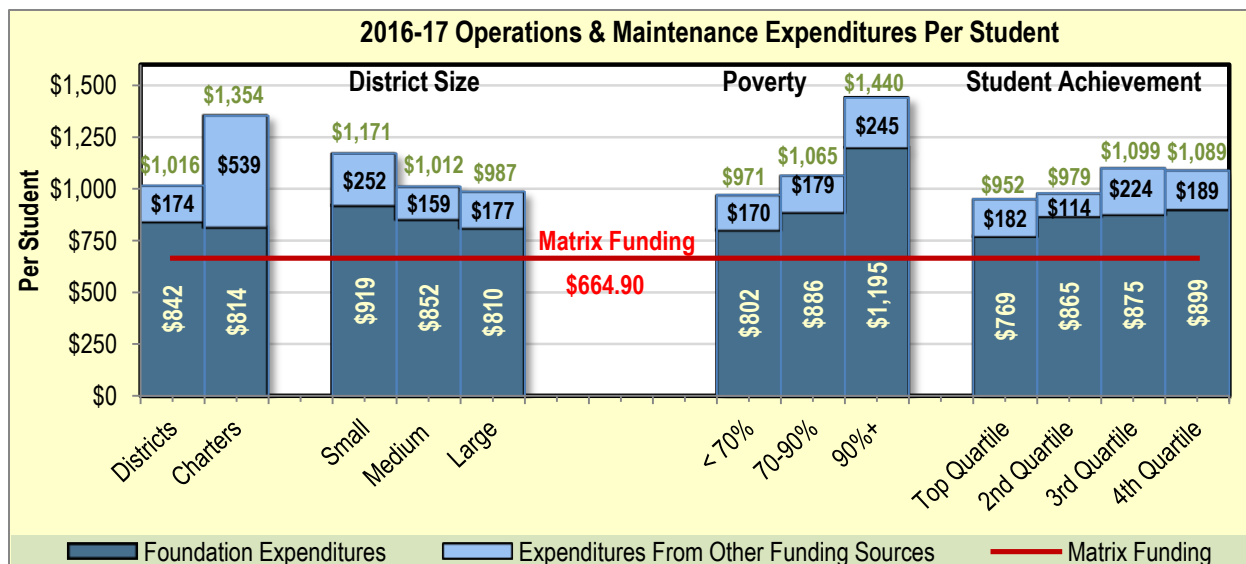
	Total FTEs	Number of Districts	Average Salary
Electricians	39	20	\$43,549
Plumbers	18	11	\$46,236
Painter/Carpenters	77	18	\$40,873
Campus Security	180	31	\$26,693
Crossing Guards	37	9	\$4,717
Safety	21	11	\$15,109

DISTRICT AND CHARTER SCHOOL EXPENDITURES

In 2016-17, districts and charter schools collectively spent \$397.6 million in foundation funding on operations and maintenance. This equates to approximately \$841 per student, which is 27% more than the \$664.90 funded in the matrix.

O&M Foundation Funding and Expenditures		
	Funding	Expenditures
2015-16	\$314,083,401	\$391,215,025
2016-17	\$314,251,288	\$397,610,647

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



Traditional districts and charter schools spent roughly similar amounts of foundation funding per student on O&M, but charter schools had greater overall O&M expenditures per student. This may be because charter schools typically lease their school space rather than constructing and owning it. Building rent is recorded through expenditure codes that are considered part of O&M. In recent years, charter schools collectively have received \$5 million annually from the state Open Enrollment Charter School Facilities Funding Aid Program (§ 6-23-908), and they have used this funding largely (\$3.65 million in 2017) to cover their building rental expenditures, which helps

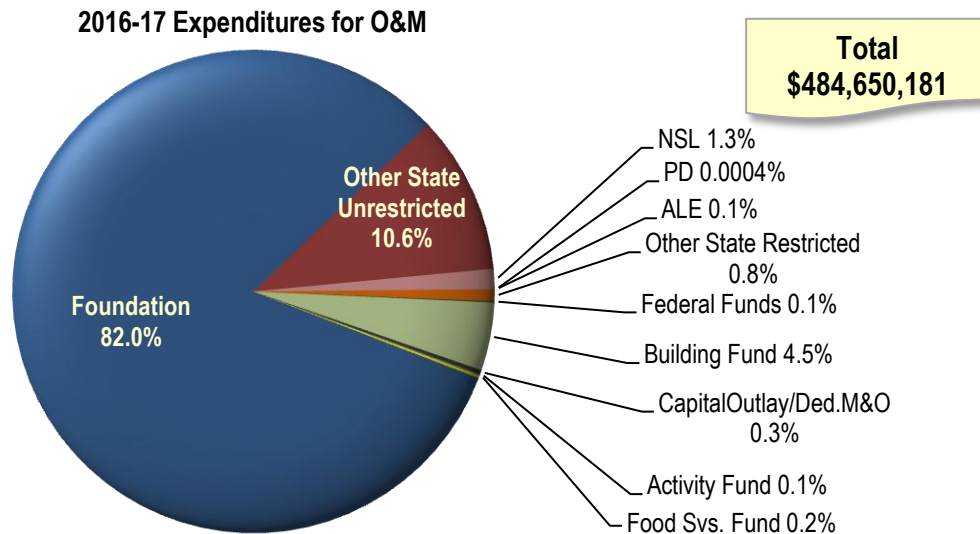
explain charter schools’ significant O&M expenditures made using funds other than foundation funding.

Small districts spent more per student on O&M than large districts, which may result from larger districts having greater economies of scale. Small school districts have a greater number of schools serving smaller student populations, which means their O&M foundation funding must be used to support more school buildings. The table below shows that small school districts are maintaining, on average, more than two schools for every 500 students, while medium districts are maintaining just over one school for every 500 students. Large districts operate 0.81 schools for every 500 students.

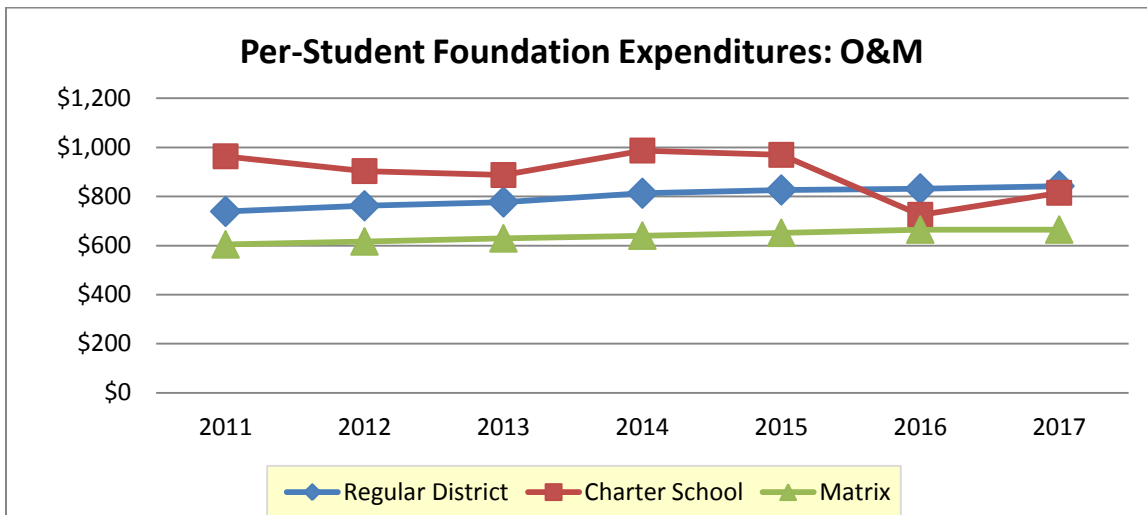
	Average # of Schools Per 500 Students
Small Districts	2.13
Medium Districts	1.13
Large Districts	0.81

High poverty districts spent considerably more per student on O&M than lower poverty districts. High poverty districts spent nearly 50% more per-student on O&M expenditures (all funding sources) than the lowest poverty group. This may be related to the fact that five of the nine high poverty districts are also small districts. When grouped by student achievement levels, the two highest achieving districts spent less per student on O&M than the two lower achieving districts.

The pie chart below shows the proportion of each funding type used to cover all O&M expenditures. Foundation funding was the primary source of funds districts used for their O&M expenditures. In 2016-17, foundation funding paid for about 82% of all O&M expenditures.



The following graph shows the per-student O&M expenditures from foundation funding between 2011 and 2017. During those years, districts’ per-student O&M expenditures from foundation funding have generally exceeded the O&M foundation funding they received, and the gap between funding and expenditures has widened. Charter schools’ foundation expenditures have also tended to exceed the amount of O&M funding they’ve received. However, in 2016, the charter school per-student foundation funding expenditures decreased significantly largely due to the receipt of new funding charters could use to pay for building rental expenses (Open Enrollment Charter School Facilities Funding Aid Program). Charter schools appear to have shifted the source of funds they use for these expenses from foundation funding to the Charter School Facilities Funding. Because they’re using the Facilities Funding, they no longer needed to use as much foundation funding to cover these expenses.



STATE RANKING: EXPENDITURES

NCES provides data on total operations and maintenance expenditures in each state. The most recent data available for all states are from 2014-15.¹⁰ According to the NCES data, Arkansas schools spent \$986 per student on O&M in 2014-15. (The enrollment data used to calculate the per-student O&M expenditures include pre-K students who have been excluded from the BLR’s analysis elsewhere in this report.)

O&M Expenditures	
National Average	\$1,078 per student
Arkansas	\$986 per student

	Per-Student Expenditures for Operations & Maintenance: Arkansas’s Rank
All States and Washington D.C. (51)	29 th highest
Southern Regional Education Board (SREB) States (16)	6 th highest
Surrounding States (7, including AR)	3 rd highest

CENTRAL OFFICE

The matrix provides funding for district-level administrative expenses including the salaries and benefits of the superintendent, administration personnel (legal, fiscal, human resources, communications, etc.), certain district instructional and pupil support directors, and clerical staff. The central office line of the matrix also provides funding for activities of the local school board. In their 2006 report, Picus and Associates noted the importance of an effective central office in a district. They wrote, “The district office has the responsibility to organize and manage all aspects of the district including the curriculum and instructional program, as well as to implement national, state, and local reforms, oversee budgets, and provide necessary materials, equipment, facilities, and repairs to the schools.”¹¹

¹⁰ National Center for Education Statistics, Revenues and Expenditures for Public Elementary and Secondary Education: School Year 2014-15 (Fiscal Year 2015), <https://nces.ed.gov/pubs2018/2018301.pdf>

¹¹ 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>

BACKGROUND: CENTRAL OFFICE IN THE MATRIX

In 2016-17, the matrix provided districts and charter schools with \$438.80 per student for central office resources. This funding level was originally established based on input from the state’s education finance consultants as well as districts’ actual expenditures for central office staffing and resources.

Between 2003 and 2006, central office costs were funded within foundation funding as part of the “carry forward”. In 2006, when the General Assembly rehired Picus and Associates to reexamine those resources, the consultants recommended breaking out the carry forward into three components, including the central office. In their attempt to specify an adequate funding level for the central office, the consultants noted that when they completed their first report for Arkansas in 2003, little research existed on the number of people and resources necessary for the central office. The issue was further complicated, they said, by the fact that some district office personnel, such as special education directors and federal coordinators, are partially funded with federal dollars.

In 2006, the consultants contended, based on research completed in 2005, that a district of 3,500 students would need a central office staff of 17 people. Prorating to a district size of 500 students, Picus and Associates reasoned, would require one-seventh of that staffing level, costing \$328 per student. Another \$263 per student would be needed for other miscellaneous central office needs, for a total of \$591 per student.

The consultants’ recommendation was based on a prototypical district of 3,500 students, but in Arkansas in 2006, only 26 of the districts, or 11%, had 3,500 or more students. To test the appropriateness of the recommended funding level for Arkansas schools, ADE obtained 2005-06 central office expenditures and personnel counts for districts with an ADM between 3,000 and 4,000. The average number of personnel was 17.82. The average total central office cost was \$395 per ADM.

Based on this information, the Adequacy Subcommittee determined that the consultants’ figures were “inflated because they were based on higher-priced geographical areas and on more duties than are required in Arkansas.”¹² The Subcommittee, instead, recommended that central office expenses be funded at \$376 per student. This figure represented the \$395 per student in actual costs, less \$19 per student for the Director of Operations and Maintenance and secretary positions that were included as part of the operations and maintenance line of the matrix.

In the years since then, the General Assembly increased the central office funding level annually through 2014-15 as inflationary adjustments were applied to the total foundation funding rate. Since 2014-15, the central office line has received an increase only in 2017 (2%). Act 743 of 2017 increased the overall per-student foundation funding rate in 2018 and 2019, but the central office component within the matrix did not change.

	2018	2019
Per-Student Rate	\$438.80	\$438.80
% Change	0%	0%

¹² Adequacy Study Oversight Subcommittee, A Report on Legislative Hearings For the 2006 Interim Study on Educational Adequacy, Final Report and Recommendations, January 22, 2007, p. 124, <http://www.arkleg.state.ar.us/education/K12/AdequacyReportYears/2006%20Adequacy%20Report%2001-22-07%20FINAL.pdf>

CENTRAL OFFICE STAFFING

Superintendent

The only central office position required by the state accreditation standards is the superintendent. Every school district with more than 300 students is required to employ one full-time superintendent. Because all school districts have at least 300 students, all districts are required to employ a superintendent. In 2016-17, all districts did have a superintendent, but one district was cited for having an inadequately licensed superintendent. The following table shows the average superintendent salary for districts and charter schools and for traditional districts when divided into groups by size and by free and reduced price lunch percentages.

Type	Average Salary
Districts	\$116,978
Charters	\$109,644 (8 charters only ¹³)
District Size	
Small	\$91,583
Medium	\$120,397
Large	\$216,449
District Poverty	
0-70% FRPL	\$124,046
70-90% FRPL	\$109,580
90+% FRPL	\$113,055

The following table shows how Arkansas superintendent salaries compare with superintendent salaries nationally. The national median salaries come from the 2016 School Superintendents Association (AASA) Superintendent Salary & Benefits Study.¹⁴ Data are collected for the report through a survey of superintendents across the country. The AASA study does not break out salary data by state. Therefore the BLR used the 2016-17 superintendent salary data recorded in APSCN as a comparison. Because the two sets of data are collected using different methodologies, they are not a perfect comparison. That said, superintendent salaries in the small and mid-size Arkansas districts appear to be lower than the superintendent salaries in similarly sized districts nationally, while the Arkansas salaries in large districts tend to outpace those nationally.

	300-2,499 Students		2,500-9,999 Students		10,000-24,999 Students	
	Male	Female	Male	Female	Male	Female
National Median	\$121,996	\$121,900	\$165,000	\$161,331	\$184,975	\$198,682
Arkansas Median	\$103,303	\$96,700	\$155,000	\$147,500	\$236,511	\$223,969 (only 1 district)

The Arkansas data above exclude charter schools.

The following table shows that, on average, male superintendents in Arkansas are paid slightly more than female superintendents. Additionally there were more than four and a half times as many male superintendents as female superintendents.

	Male	Female
Number of FTE Superintendents	201	43
Average Salary	\$117,810	\$113,080

The data above exclude charter schools. Some districts have more than 1 FTE superintendent due to mid-year changes and other circumstances.

¹³ Only eight of the 24 charter school systems documented having a superintendent in the 3637 staffing report. Some charter schools without a superintendent did list principals, which may be the highest administrator those schools have, particularly for the charter schools that operate only one school.

¹⁴ Domenech, D.A., 2016 AASA Superintendent Salary & Benefits Survey, February 2017

Assistant Superintendents

About 27% of the traditional school districts employ assistant superintendents, although some of those districts employ staff to serve only part time as an assistant superintendent. Districts with assistant superintendents tend to be larger districts, but several districts with fewer than 1,000 students employed an assistant superintendent in 2016-17. The smallest district employing an assistant superintendent had just over 600 students.

	Average Salary	Total FTEs	# of Districts and Charters With These Staff
Assistant Superintendent (certified)	\$104,465	84	65 (63 districts and two charters)

Median salaries for assistant superintendents are slightly below the median salaries nationally for districts of all sizes.¹⁵

	300-2,499 Students	2,500-9,999 Students	10,000-24,999 Students
National Median	\$105,680	\$125,000	\$130,000
Arkansas Median*	\$87,860	\$109,275	\$119,434

Arkansas median salaries are based on the median of each district's average salary for assistant superintendents. Salaries for part-time assistant superintendents were annualized, and an average salary was calculated for districts with more than one assistant superintendent.

Other Central Office Staff

Districts employ a variety of other types of employees in the central office. The following table shows the different types of staff districts employ, based on the available APSCN employee codes, the number of full-time employees serving in those roles statewide, and the number of districts employing each type of position.¹⁶

	Average Salary	Total FTEs	# of Districts and Charters With These Staff
Director of Federal Programs (certified)	\$72,097	87	162
Support Services Business	\$39,791	29	20
Business Manager	\$64,623	60	55
Finance Officer	\$45,971	305	174
Bookkeeper or Accountant	\$40,353	284	122
Personnel Director	\$53,139	65	29
Purchasing Agent	\$45,960	40	14
Secretary/Clerk (includes both school-level and district-level secretaries)	\$27,028	2,437	257
Administrative Technology	\$45,287	448	172
Other Central Support Services	\$35,165	65	46

¹⁵ Domenech, D.A., 2016 AASA Superintendent Salary & Benefits Survey, February 2017

¹⁶ Special education directors are included in the central office expenditures provided later in this report. However, in the page 3637 coding used to examine employee salaries, there is not a code specific to special education directors.

STATE RANKING: STAFFING

NCES provides data on the number of local education agency (LEA) (i.e., district-level) administrators and LEA administrative support staff in each state. This NCES category includes superintendents, deputy superintendents, assistant superintendents, district-level business managers and instructional support staff. The most recent data available for all states are from 2015-16. According to the NCES data, Arkansas had a total of 0.62 LEA administrators per 500 students in 2015-16. (The enrollment data used to calculate the LEA administrators per 500 students include pre-K students who are excluded from the BLR’s analysis elsewhere in this report.)

	District Administrators Per 500 Students
National Average	.67
Arkansas	.62

Number of District Administrators	
	Arkansas’s Rank
All States and Washington D.C. (51)	31 nd highest
SREB States (16)	8 th highest
Surrounding States (7, including AR)	2 nd highest

The NCES category for LEA administrative support staff includes business office support, data processing employees, and secretarial and other clerical staff. In 2015-16, Arkansas had 2.64 administrative support staff per 500 students.

	District Administrative Support Staff Per 500 Students
National Average	1.89
Arkansas	2.64

Number of District Administrative Support Staff	
	Arkansas’s Rank
All States and Washington D.C. (51)*	7 th highest
SREB States (16)	2 nd highest
Surrounding States (7, including AR)	2 nd highest

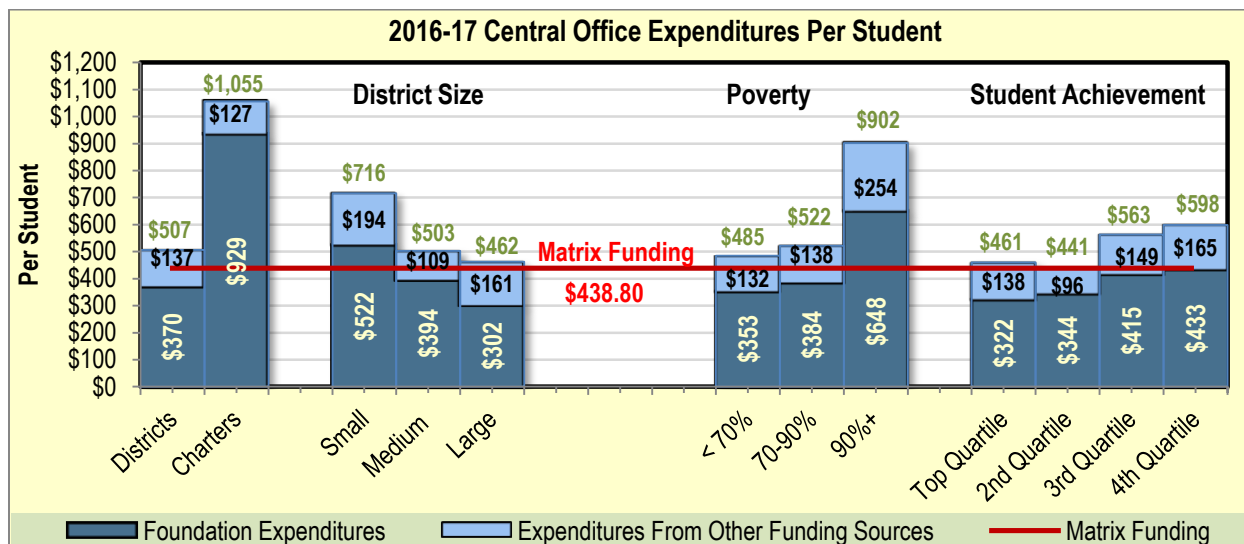
*Data were not available for Nevada

DISTRICT AND CHARTER SCHOOL EXPENDITURES

Districts and charter schools collectively spent about \$182 million from foundation funding on central office expenditures in 2016-17. This equates to \$385 per student, or about \$54 per student less than the funding amount provided in the matrix.

Central Office: Foundation Funding and Expenditures		
	Funding	Expenditures
2015-16	\$203,216,542	\$175,955,198
2016-17	\$207,389,781	\$182,033,461

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



The spending patterns for central office expenses differed considerably between traditional school districts and open-enrollment charter schools. While districts spent less foundation funding than they received for central office expenses, charter schools spent nearly \$500 per student in foundation funding above the matrix amount. One reason for this level of expenditure appears to be charter schools’ large per-student expenditures in the following areas.

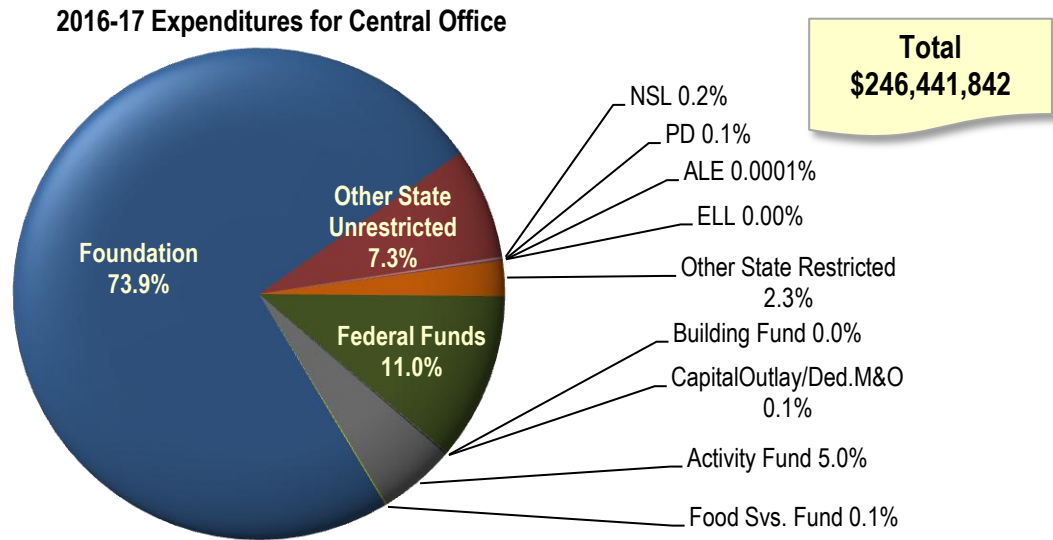
- Management consulting services: Charter schools may have higher expenditures for management services because many operate under a multi-school organization that provides an array services. One charter school in particular accounted for more than half of all charter school expenditures on management consulting services.
- Educational consulting services: Two charter schools had significant expenditures coded as educational consulting services. Both of these charter schools have further described these expenditures in APSCN as management fees.
- Central office classified staff: It appears that several charter schools entered their superintendent salaries as classified salaries, rather than as certified salaries. This may account for the fact that charter schools recorded higher expenditures for classified staff in the central office than traditional districts.
- Central office administrator salaries: Some charter schools’ central office expenditures may also be higher than districts because they pay administrators salaries similar to those in much larger districts. Two of the 24 charter schools had fewer than 100 students, and 14 had fewer than 350. Of the eight charter schools that paid a superintendent salary, the average superintendent salary was about \$109,700, or \$198 per student.¹⁷ The average salary for school districts was about \$117,000, or \$62 per student. One charter school with fewer than 70 students paid its superintendent a salary of \$130,000, or about \$1,956 per student. While only one traditional school district paid more than \$300 per student for its superintendent, four of the 24 charter schools paid more than \$800 per student.

In comparing central office expenditures by district size, it’s clear small traditional school districts spent more per student than larger districts. This is likely due to the fact that larger districts benefit from some economies of scale in the central office. For example, while small districts generally pay their superintendents lower salaries than large districts, small districts still pay more on a per-student basis (\$186 per student for small districts on average, compared with \$20 per student for large districts).

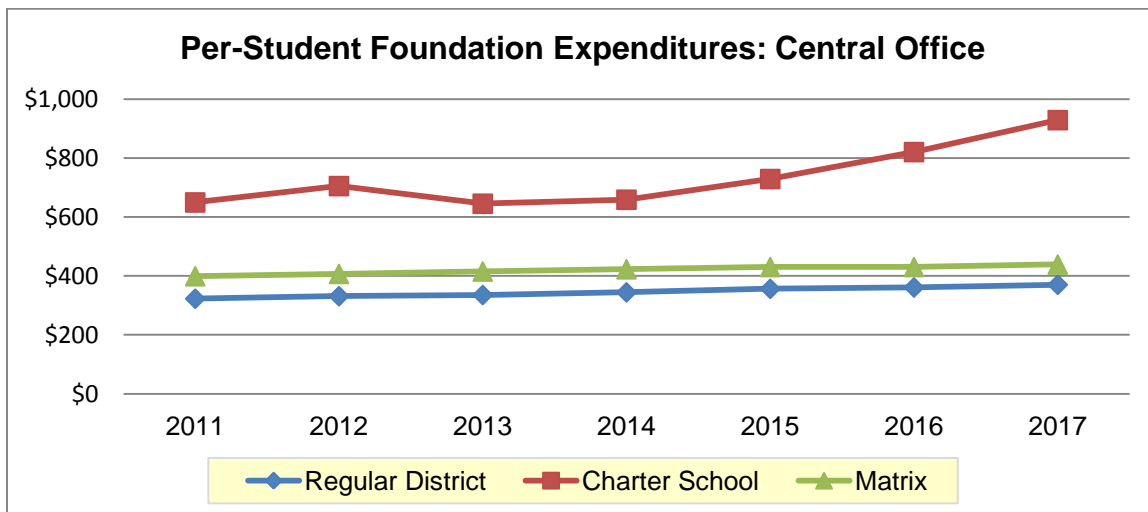
¹⁷ Because several charter schools entered their superintendent salaries as classified salaries, rather than as certified salaries, those salaries are not included in the average salary calculation.

High-poverty districts spent more than 1.8 times the amount of foundation funding that low-poverty districts spent. This is largely the result of higher staffing expenditures per student. While high poverty districts tend to have lower central office staff salaries, they tend to employ more people per 500 students than lower poverty districts. The lowest-achieving districts spent 1.3 times the per-student foundation funding that the highest achieving districts spent.

The pie chart below shows the proportion of each funding type used to cover all central office expenditures. Foundation funding was the primary source of funds for central office expenditures. Districts and charter schools used foundation funding to cover 74% of all their central office expenditures. Federal funding was another frequently used funding source for central office costs. Federal funds covered about 11% of all central office expenditures in 2016-17.



The following graph shows the per-student central office expenditures from foundation funding between 2011 and 2017. During those years, districts have consistently spent less foundation funding on central administration than they were provided in the matrix. While charter schools have historically spent more foundation funding per student on central administrative expenses than they have received in foundation funding, the difference has been growing in recent years. That increase is largely due to spikes in central office expenditures made by four relatively new charter schools (those operating four years or less) and a more gradual increase by one more established charter school.



STATE RANKING: EXPENDITURES

NCES provides data on total expenditures for district administration in each state in two categories:

General administration expenditures, which are “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.”

Other support services, which are “expenditures 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).”

The most recent expenditure data available for all states are from 2014-15.¹⁸ According to the NCES data, Arkansas school districts spent more than the national per-student average on general administration, but less than the national per-student average on other central office support services in 2014-15.

General Administration Expenditures	
National Average	\$229 per student
Arkansas	\$247 per student

Per-Student Expenditures for District Administration	
	Arkansas’s Rank
All States and Washington D.C. (51)	25 th highest
SREB States (16)	3 rd highest
Surrounding States (7, including AR)	4 th highest

Other Support Services Expenditures	
National Average	\$415 per student
Arkansas	\$297 per student

Per-Student Expenditures for District Administration	
	Arkansas’s Rank
All States and Washington D.C. (51)	34 th highest
SREB States (16)	7 th highest
Surrounding States (7, including AR)	4 th highest

¹⁸ National Center for Education Statistics, Revenues and Expenditures for Public Elementary and Secondary Education: School Year 2014-15 (Fiscal Year 2015), <https://nces.ed.gov/pubs2018/2018301.pdf>

TRANSPORTATION

Transportation expenditures include school bus and district vehicle operations and maintenance, transportation personnel, insurance, equipment costs, and bus purchases. Transportation expenditures do not include expenditures for athletic or activity transportation. State law does not require school districts to provide general transportation to students, although all districts and some charter schools provide bussing services.

BACKGROUND: TRANSPORTATION IN THE MATRIX

In 2016-17, the matrix provided districts and charter schools with \$321.20 per student for transportation expenses. This funding level was originally established based on input from the state's education finance consultants as well as districts' actual expenditures for student transportation.

In 2003, Picus and Associates did not provide a recommendation on funding for transportation. The General Assembly chose to include the funding for transportation expenses within the carry forward category in the matrix.

In their 2006 report, the consultants recommended funding transportation at \$286 per student, based on districts' actual 2004-05 transportation expenses inflated for 2007-08. However, the consultants noted that while the state transportation expenditures averaged around \$286 per ADM, individual districts' expenditures varied considerably, from a low of \$67 to a high of \$695 per student. In a June 2006 presentation, the consultants recommended that the General Assembly collect better data on transportation operations and develop a funding formula based on student density, mileage or hours of operation, rather than on ADM. They recommended that the General Assembly consider moving the funding for transportation out of the matrix to be funded separately. Although each biennial Adequacy Study since 2006 has examined transportation expenditures, the General Assembly has not altered the funding distribution method. However, supplemental funding has been provided to districts in some years beyond the transportation funding provided within foundation funding.

Transportation funding within the matrix received annual inflationary adjustments each year through 2015. In their final report of the 2014 Adequacy Study, the Education Committees recommended keeping the per-student foundation funding rate for transportation flat for FY16 and FY17.¹⁹ While there was no increase to the transportation component in the matrix, the Committees recommended creating a separate, supplemental funding program for districts with high transportation costs. They recommended that the total funding amount should be established at the equivalent of 2% of the total funding provided for transportation in FY16 and FY17 (about \$3 million each year) and that the funding should be distributed by a method developed by the BLR. While the General Assembly appropriated an additional \$3 million for enhanced transportation in both FY16 and FY17,²⁰ a method of distributing the money to the districts was included in legislation only for FY17.²¹ That means ADE received \$3 million each year, but only distributed the funding to districts in FY17.

In the 2016 Adequacy Study, the House and Senate Education Committees again recommended no changes to the per-student funding in the matrix for transportation, but they again recommended supplementing foundation funding outside the matrix. The House version of the 2016 final report recommended supplementing the transportation funding in the matrix with an additional \$3 million each

¹⁹ A Report on Legislative Hearings for the 2014 Interim Study on Educational Adequacy, Recommendations of the House and Senate Interim Committees on Education, November 1, 2014, <http://www.arkleg.state.ar.us/education/K12/AdequacyReportYears/2014%20Adequacy%20Report%20Volume%20I,%2014-001,%20Nov.%201,%202014.pdf>

²⁰ Act 987 of 2015 and Act 229 of 2016

²¹ Act 445 of 2017

year for districts with high transportation costs.²² The Senate version of the 2016 final report called for \$3 million in supplemental funding in FY18 and then another \$3 million in FY19 added to the FY18 amount, or an additional \$6 million in FY19.²³ Act 743 of 2017 set the per-student foundation funding rate to include \$321.20 for transportation in FY18 and FY19. Act 743 also provided \$3 million in FY18 and \$3 million in FY19 for supplemental transportation in addition to the funding provided through the matrix.

	2018	2019
Per-Student Rate	\$321.20	\$321.20
% Change	0%	0%

TRANSPORTATION STAFFING

Bus drivers make up the majority of transportation staffing, but districts and charters also frequently employ directors of transportation and bus mechanics. The following table provides the types of employees involved with transportation, their average salaries statewide, the number of FTEs employed in those positions and the number of districts employing them.

	Average Salary	Total FTEs	# of Districts and Charters With These Staff
Directors of Pupil Transportation	\$46,470	165	153
Bus Mechanics	\$35,557	326	181
Bus Drivers	\$13,147	4,714	245
Bus Dispatcher	\$25,408	39	40
Bus Monitor (in transit monitor)	\$11,553	188	56

DISTRICT AND CHARTER SCHOOL EXPENDITURES

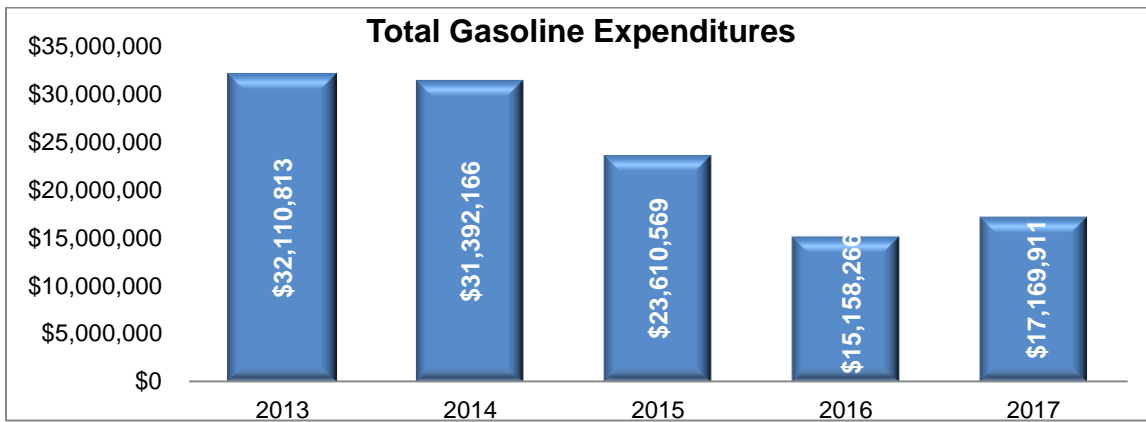
Districts and charter schools collectively spent about \$144.8 million from foundation funding to cover their student transportation costs. This equates to \$306 per student, which is about \$15 less than the \$321.20 provided in the matrix.

Transportation: Foundation Funding and Expenditures		
	Funding	Expenditures
2015-16	\$151,727,460	\$149,378,812
2016-17	\$151,808,563	\$144,770,284

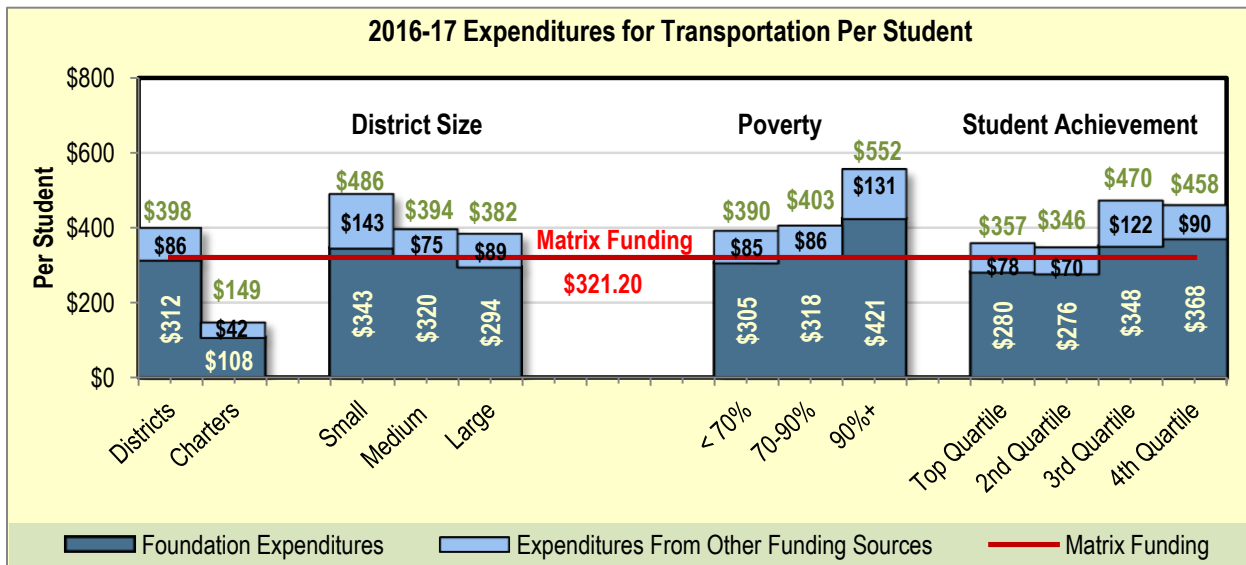
The difference in individual districts’ foundation funding expenditures for transportation in 2016-17 varied from a low of \$0.54 per pupil to a high of \$814 per pupil. Some districts may have low foundation funding expenditures for transportation because they receive other types of funding they can use to cover these costs, including Desegregation aid, Isolated funding or Special Needs Isolated funding. Foundation funding expenditures for transportation declined by about \$4.6 million between 2016 and 2017, which may be due, in part, to a drop in gasoline prices. District and charter expenditures on gasoline (from all funding sources) totaled more than \$32 million in 2012-13 and dropped nearly 46% by 2017.

²² Final Report on the Legislative Hearings for the 2016 Educational Adequacy Study, Recommendations of the House Interim Committee on Education, Revised February 1, 2017, http://www.arkleg.state.ar.us/education/K12/AdequacyReportYears/2016HouseEducationalAdequacyReportVolumeI_Feb2017_Revision.pdf

²³ Final Report on the Legislative Hearings for the 2016 Educational Adequacy Study, Recommendations of the Senate Interim Committee on Education, Revised November 1, 2017, http://www.arkleg.state.ar.us/education/K12/AdequacyReportYears/2016_Adequacy-Report_Volume-I_2017-11-01%20SENATE%20Revision.pdf



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



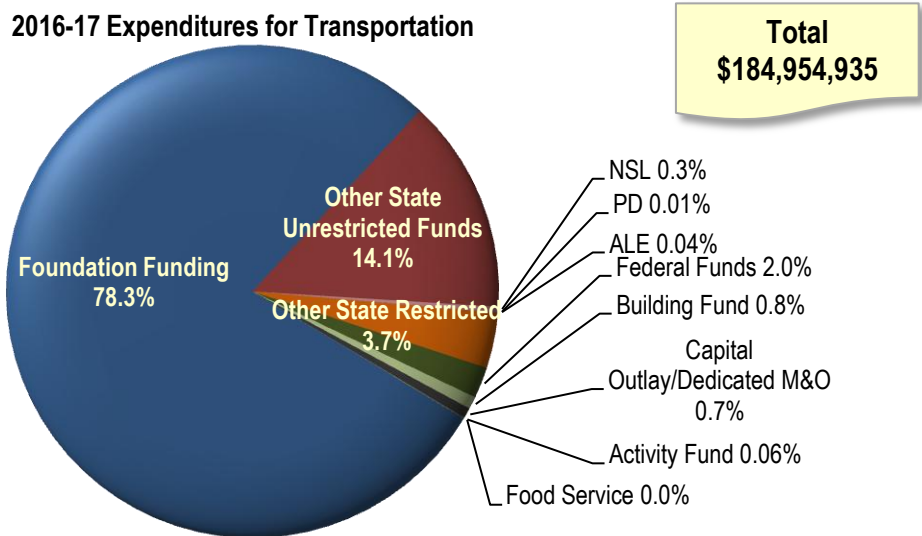
Charter schools had much lower transportation expenditures than traditional school districts. This is likely due to the fact that many charter schools do not provide daily transportation to students. Nine of the 24 charter schools had either no foundation funding transportation expenditures or had expenditures of less than \$10 per student.

Small districts spent more per-student on transportation than larger districts, both in terms of expenditures from foundation funding and from all other funding sources. In small districts, bus riders tend to make up a greater percentage of the total student population than they do in large districts, and small districts tend to have a larger number of bus route miles for the size of their total student body.

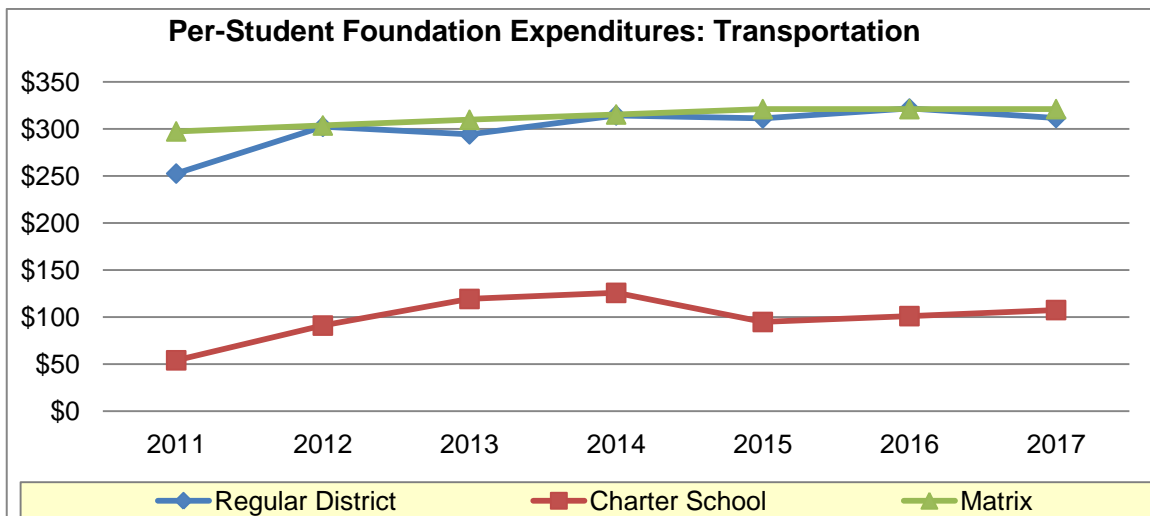
	Riders as % of ADM	Route Miles Per 500 Students
District Size		
Small	68%	452
Medium	61%	291
Large	43%	216
District Poverty		
<70%	54%	260
70-90%	55%	293
90%	63%	449

When grouped based on poverty levels, the two categories of districts in the lower poverty levels had relatively small differences in per-student spending on transportation, while the districts in the highest poverty category had significantly higher transportation spending per student. This appears to result from differences in ridership and route miles in these districts.

The pie chart below shows the proportion of each funding type used to cover all transportation expenditures (excluding athletic and activities transportation). Foundation funding covered 78% of districts' and charter schools' total transportation expenditures. Other significant sources of funding used by districts and charter schools included other unrestricted state funding, such as isolated funding, and state restricted funds.



Since at least 2011, districts' per-student transportation expenditures from foundation funding have generally tracked with the matrix funding provided for that purpose, while charter schools' foundation funding expenditures have generally fallen below the matrix funded amount. While gasoline expenditures have dropped fairly dramatically in the last few years, the overall expenditures have remained fairly level due to increases in transportation-related salaries and bus purchases.



STATE RANKING: EXPENDITURES

NCES provides data on total transportation expenditures in each state. The most recent data available for all states are from 2014-15.²⁴ According to the NCES data, Arkansas schools spent an average of \$367 per student on transportation in 2014-15. (The enrollment data used to calculate the per-student transportation expenditures include pre-K students who have been excluded from the BLR’s analysis elsewhere in this report.)

2014-15 Transportation Expenditures	
National Average	\$483 per student
Arkansas	\$367 per student

	Per-Student Expenditures for Student Transportation: Arkansas’s Rank
All States and Washington D.C. (51)	38 th highest
SREB States (16)	11 th highest
Surrounding States (7, including AR)	4 th highest

²⁴ National Center for Education Statistics, Revenues and Expenditures for Public Elementary and Secondary Education: School Year 2014-15 (Fiscal Year 2015), <https://nces.ed.gov/pubs2018/2018301.pdf>

OVERVIEW

DISTRICT COMPARISONS

The variety of needs districts have 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 will review 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 data are provided as the per-student funding amount provided by the matrix and the per-student expenditures of districts and charter schools. This report covers three of the matrix line items: O&M, central office, and transportation. The other matrix items will be covered in upcoming reports.

DISTRICTS AND OPEN-ENROLLMENT CHARTER SCHOOLS

	Matrix	Traditional Districts	Charter Schools
Classroom Teachers	\$3,202.10		
Special Education Teachers	\$372.34		
Instructional Facilitators	\$320.98		
Library Media Specialists	\$109.13		
Counselors and Nurses	\$320.98		
Principal	\$198.10		
School-level Secretary	\$80.10		
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		
TOTAL	\$6,646		

DISTRICT SIZE

	Matrix	Small (750 or fewer)	Medium (751 to 5,000)	Large (over 5,000)
Classroom Teachers	\$3,202.10			
Special Education Teachers	\$372.34			
Instructional Facilitators	\$320.98			
Library Media Specialists	\$109.13			
Counselors and Nurses	\$320.98			
Principal	\$198.10			
School-level Secretary	\$80.10			
Technology	\$250.00			
Instructional Materials	\$183.10			
Extra Duty Funds	\$64.90			
Supervisory Aides	\$50.00			
Substitutes	\$69.00			

	Matrix	Small (750 or fewer)	Medium (751 to 5,000)	Large (over 5,000)
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			
TOTAL	\$6,646			

POVERTY LEVEL

	Matrix	Low (< 70%)	Medium (70%-90%)	High (90% or more)
Classroom Teachers	\$3,202.10			
Special Education Teachers	\$372.34			
Instructional Facilitators	\$320.98			
Library Media Specialists	\$109.13			
Counselors and Nurses	\$320.98			
Principal	\$198.10			
School-level Secretary	\$80.10			
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			
TOTAL	\$6,646			

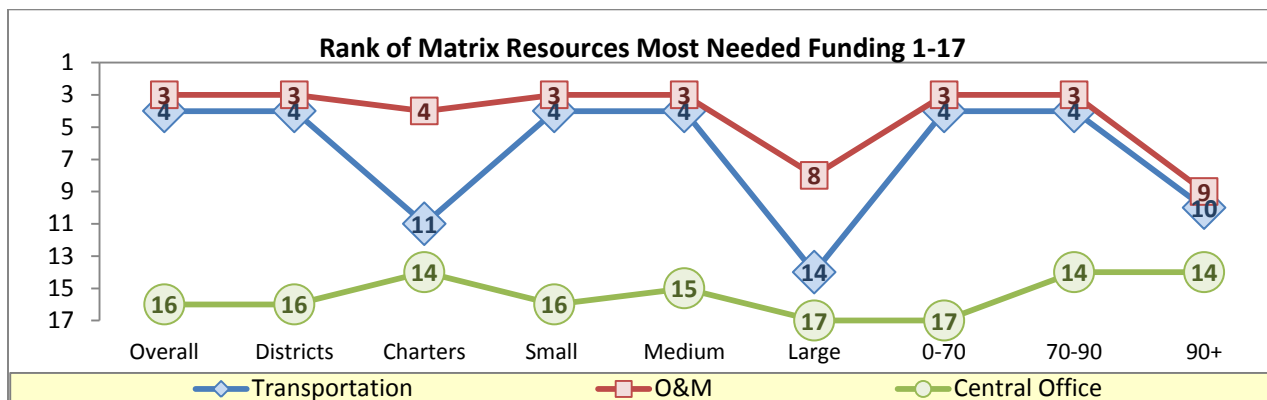
STUDENT ACHIEVEMENT

	Matrix	Top Quartile	2nd Quartile	3rd Quartile	4th Quartile
Classroom Teachers	\$3,202.10				
Special Education Teachers	\$372.34				
Instructional Facilitators	\$320.98				
Library Media Specialists	\$109.13				
Counselors and Nurses	\$320.98				
Principal	\$198.10				
School-level Secretary	\$80.10				
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				
TOTAL	\$6,646				

DISTRICT SURVEY RESPONSES

As part of the 2018 Adequacy Study, the BLR conducted a survey 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.



Districts generally rated O&M and transportation as top areas needing additional funding and central office expenses as a low area of need. Charter schools, large districts and high poverty districts tended to rank transportation as a lower need area than other district groupings did. Large districts and high poverty districts also ranked O&M as a lower need than other district groupings did.

NATIONAL COMPARISON

One measure of the adequacy of Arkansas’s education funding system is its total per-pupil spending. The following tables show how Arkansas’s per-pupil expenditures (including spending from all funding sources) compare with other states’. School year 2014-15 is the most recent year for which national data are available through the National Center for Education Statistics (NCES). The data include expenditures from all funding types excluding capital outlay and interest on school debt.²⁵

Arkansas's per-pupil expenditure for 2014-15 ranks 7th among the 16 member states of the Southern Regional Education Board (SREB) listed in the following table. Nationally Arkansas ranks 34th, and its per-pupil expenditure is more than \$1,600 below the national average.

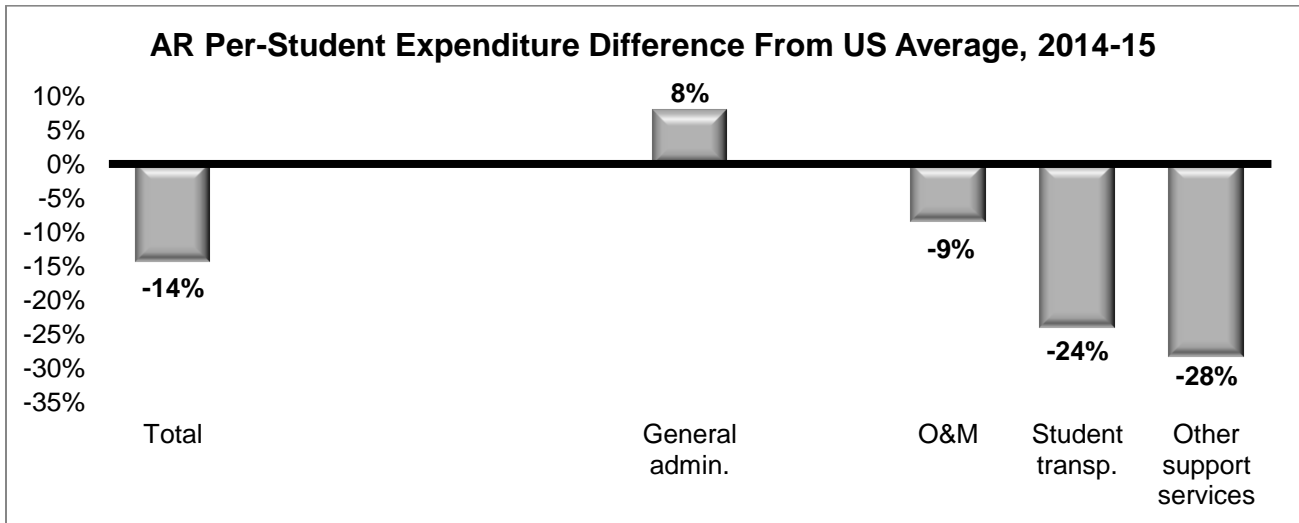
²⁵ National Center for Education Statistics, Revenues and Expenditures for Public Elementary and Secondary Education: School Year 2014-15 (Fiscal Year 2015), <https://nces.ed.gov/pubs2018/2018301.pdf>

SREB States	Total Expenditure Per Pupil	Rank
Maryland	\$14,431	1
Delaware	\$13,882	2
West Virginia	\$11,512	3
U.S.	\$11,454	
Virginia	\$11,235	4
Louisiana	\$11,106	5
South Carolina	\$9,831	6
Arkansas	\$9,805	7
Kentucky	\$9,560	8

SREB States	Total Expenditure Per Pupil	Rank
Georgia	\$9,476	9
Alabama	\$9,146	10
Florida	\$9,113	11
Texas	\$9,081	14
Tennessee	\$8,759	12
North Carolina	\$8,529	13
Mississippi	\$8,445	15
Oklahoma	\$8,075	16

Source: NCES Revenues and Expenditures for Public Elementary and Secondary Education: School Year 2014-15 (Fiscal Year 2015). Table 4

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, other central office administrative support, operations & maintenance and student transportation. Other types of expenditures will be addressed in upcoming reports and added to the chart.



General administration expenditures are those “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.”

Operation and maintenance (O&M) 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).”

APPENDIX: ACRONYMS

AASA—The School Superintendents Association
ADE—Arkansas Department of Education
ADM—Average Daily Membership
ALE—Alternative Learning Environment
APSCN—Arkansas Public School Computer Network
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
LEA—Local Educational Agency
NCES—National Center for Education Statistics
NSL—National School Lunch
PD—Professional Development
O&M/M&O—Operations and Maintenance
SREB—Southern Regional Education Board
URT—Uniform Rate of Tax