# Exhibit D2

# K-12 Public Education Funding

2022 ADEQUACY STUDY

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### Introduction

Arkansas's current funding structure for education dates back to the educational reforms put in place after the state's 2003 Supreme Court decision, known as "Lake View." The court found that the state had failed to fund public schools adequately or equitably. After considerable study, the 2003 General Assembly adopted a funding system largely based on three groups of funding sources:

- **Per-Pupil Foundation Funding.** This is the largest source of funds and has been determined each year by applying amounts to elements in a matrix that are deemed required to provide an adequate education.
- **Categorical funds.** On top of the foundation amount, money provided through "categorical" funds that were created to address specific student needs helped ensure an equitable education for students. Another categorical funding stream provided for teacher professional development.
- **Supplemental funding streams.** Several other smaller, supplemental funding streams supported adequacy and equity efforts as well. Some of these predate the 2003 education reforms; however, several others have been added in more recent years.

This report examines those revenues at the state level that are dedicated to education and then each funding stream that flows to school districts and charter school systems for their use in providing an adequate and equitable education for students. When possible, context is provided for Arkansas's funding methods and amounts through literature reviews of relevant research and through comparisons with high-performing and surrounding states.

## Educational Funding – A Big Investment

Local, state and federal dollars combine to form the total funding available to Arkansas's public schools. Altogether, state funding in the 2020 school year (the most recent for which data was available) accounted for about 47% of the total, local funds accounted for about 39% and federal funding accounted for about 13%. Funds for education at the state level are derived from the following:

The **Public School Fund Account (PSF)** is the primary account used to distribute state funds to school districts and charter schools. The primary sources of funding for the PSF are state general revenue, the Educational Excellence Trust Fund and transfers from the Educational Adequacy Fund.

The **Educational Excellence Trust Fund (EETF)** is funded with an "off-the-top" deduction from gross general revenues, and the amount distributed to EETF is 14.14% of prior year sales and use tax collections. The EETF was created in 1991 to provide additional funding for teacher salaries and to support other programs of educational opportunity. The Public School Fund receives 67.16% of the total funding available to the EETF, and these funds are used by the Arkansas Department of Education's Division of Elementary and Secondary Education to provide a portion of the State Foundation Funding Aid distributed to districts and are to be used for teacher salaries.

The Educational Adequacy Fund (EAF) derives its funding from:

- A 7/8 cent sales tax increase
- The expansion of sales taxes to some services
- An increase in vending machine decal fees
- An increased minimum corporate franchise tax and tax rate, and
- A portion of the six-cent per gallon dyed diesel tax.

Arkansas Code Annotated § 19-5-1227(c)(1) provides that the EAF is to be used to provide funds to the Department of Education PSF and the Department of Education Fund Account "to fulfill the financial obligation of the state to provide an adequate educational system as authorized by law".

The **Department of Education Fund Account** is primarily used for the operations of DESE. The primary sources of funding for the Department of Education Fund Account are state general revenue and transfers from the EAF and the EETF.

The **Educational Facilities Partnership Fund Account (EFPF)** is the account used to distribute school district funding for facilities construction. The primary funding sources for the EFPF Account are state general revenue and unexpended balances of funds allocated in the Public School Fund for the Bonded Debt Assistance Program as required in A.C.A. § 6-20-2503(b)(3)(B). The EFPF Account has also received funding through one-time transfers from the General Improvement Fund and from state surplus funds held in the General Revenue Allotment Reserve Fund.

The following table shows the state funding that has been made available to DESE from the 2005 Fiscal Year to the 2021 Fiscal Year for K-12 Education. These are not the amounts allocated or expended from these funding accounts.

			Educational E Trust Fund				
	Department of Education	General Education Fund -	Dept of Education Fund Acct of	Dept of Education	EFPF and Dept. of Public School Academic		
Fiscal	Public School Fund Account	Department of Education	the Public School Fund	Fund Account	Facilities and Transp. Fund	Educational Adequacy	Total All
Year	(JAA)/1	Fund Account	(JAA)/5	(EGA)/5	Account	Fund	Selected Funds
2005	1,587,868,208	11,841,192	165,146,201	809,075	20,439,774	442,872,886	2,228,977,336
2006	1,664,928,944	13,536,267	178,219,239	873,122	54,214,982	426,505,888	2,338,278,442
2007	1,722,737,993	13,433,942		936,815		448,450,030	2,467,755,062
2008	1,830,265,989	15,799,231	200,422,877	981,901	502,643,494	438,730,903	2,988,844,395
2009	1,843,274,503	14,769,806	193,587,342	948,413	51,585,902	433,090,041	2,537,256,006
2010	1,790,947,911	17,529,999	190,786,665	934,692	36,916,527	411,286,403	2,448,402,196
2011	1,829,267,307	15,167,661	180,391,694	883,765	57,704,295	451,110,054	2,534,524,776
2012	1,882,316,142	15,701,088	188,051,836	921,294	58,528,882	438,147,425	2,583,666,667
2013	1,936,432,524	15,471,687	193,026,506	945,665	62,465,585	444,832,631	2,653,174,598
2014	1,980,965,210	16,578,345	195,093,479	955,792	84,858,082	456,647,180	2,735,098,088
2015	2,072,170,259	16,587,878	199,766,427	978,685	51,071,087	455,078,909	2,795,653,245
2016	2,113,356,522	16,162,434	202,031,412	989,781	98,785,465	460,624,739	2,891,950,353
2017	2,136,234,690				59,633,327	481,006,228	2,904,572,188
2018	2,110,560,691		215,134,285	1,053,974		506,417,821	2,999,908,845
2019	2,139,916,945		222,454,322	1,089,836		467,249,996	2,907,744,097
2020	2,169,729,298		226,827,803		62,387,201	595,416,316	
2021	2,178,778,730	16,346,413	234,068,325	1,146,735	63,059,675	623,996,221	3,117,396,099

Source: Arkansas Administrative Statewide Information System - Trial Balance Report

A net increase of \$45.6 million in funding resulted for these selected funds in FY21 over the prior

**year.** This net increase includes an additional \$9 million in the Education - Public School Fund and marginal increases to the Department of Education Fund and the Division of Public School Academic Facilities and Transportation. The funding available in the Educational Adequacy Fund increased by \$28.6 million from FY20. The funding for the Education Excellence Trust fund also increased by \$7.5 million due to revenue growth.

This money is distributed from the state to school districts though a number of funding streams. Foundation funding supplies the backbone for adequacy, but categorical funds and additional funds for specific purposes such as transportation or teachers' salaries provide additional muscle to help school districts and public charter school systems achieve adequate and equitable education delivery. These combine with still other state and federal dollars to pay for the full spectrum of costs that schools incur.

#### LITERATURE REVIEW AND BEST PRACTICES

Arkansas's Lake View case – in addition to an earlier 1983 lawsuit cited as *Dupree v. Alma* – was one of a number of similar lawsuits in the late 20<sup>th</sup> and early 21<sup>st</sup> centuries resulting in states' increased roles in education funding. From 1920 to the 1970s, local governments provided 80% of school funding, usually through property taxes. After the 1970s, states and local governments became largely equal partners, with the federal government contributing about 10%.<sup>1</sup>

Much of the education research that has occurred during the last two decades had the advantage of being able to compare results before and after the court-ordered school finance reforms. In other words, researchers can now compare student outcomes before and after an influx of money that was distributed statewide. This study design was a change from earlier research, which was often more descriptive than quantitative, usually comparing a district with additional money against a similar district without the added dollars. A compilation of the post-school finance reform literature finds that *increased funding can impact student achievement* and lead to increased test scores, higher graduation rates and college enrollment and completion, especially if the funds are devoted to teacher pay for current teachers and to providing additional resources for students in poverty.<sup>2</sup>

Providing an adequate and equitable education is the goal of Arkansas's state funding system, as it is for many states. Of the four common methods for deciding educational adequacy funding amounts, Arkansas's biennial study most closely resembles the **evidence-based** model as it relies largely on research to inform what is needed for adequacy and what those needs cost. The other three methods include **professional judgment**, which depends on the input of educators (Arkansas educators take part in the biennial adequacy studies through surveys and site visits); **successful schools/districts**, which looks at the overall funding used by schools with high-achieving students to estimate the needs of all schools; and **cost function**, which uses statistical formulas to determine how much it will cost to achieve state-set outcomes.<sup>3</sup>

A recent study also categorizes funding approaches into input-oriented and outcome-oriented methods. The former identifies the inputs and their costs to derive total funding needs. The latter set examine the relationship between spending on programs and desired outcomes to predict needed expenses to reach those desired outcomes. To do so, they also take into account the varying costs associated with different student populations and the characteristics of the schools and districts. Arkansas's method for determining adequacy closely resembles an input model, as it focuses on paying for the items prescribed for in the matrix.

<sup>&</sup>lt;sup>1</sup> Chingos, M. and Blagg K. (Urban Institute, May 2017) "Do Poor Kids Get Their Fair Share of School Funding?".

<sup>&</sup>lt;sup>2</sup> Kirabo Jackson, C. (Northwestern University, Winter 2018) "Does School Spending Matter? The New Literature on an Old Question." https://works.bepress.com/c\_kirabo\_jackson/38/

<sup>&</sup>lt;sup>3</sup> Augenblick, Palaich and Associates. (Maryland State Department of Education, September 2015) "A Comprehensive Review of State Adequacy Studies Since 2003."

# All Funding Streams for Arkansas Education

As stated earlier, Arkansas's primary funding stream for education is known as foundation funding, which is derived from a funding matrix. The state provides additional funding for the operation of schools through categorical funding and a number of supplemental fund sources, some of which are restricted to specific uses. Schools also receive federal dollars. All of these are discussed below.

#### FOUNDATION FUNDING: ARKANSAS'S PRIMARY FUNDING STREAM FOR K-12 EDUCATION

The base amount for foundation funding – the state's main source to ensure adequacy – is the per-pupil amount derived from the funding matrix multiplied by the enrollment. Enrollment for traditional schools and existing charter schools is based on the average daily membership for the first three quarters of the prior school year. For new charter schools or those that have added grade levels and/or expanded enrollment caps, foundation funding is based on current year average daily membership. The items in the funding matrix have remained largely unchanged since its inception.

Arkansas distributed \$3.3 billion in foundation funding during the 2021 school year.

Part of the money for foundation funding comes from the millage raised by school districts themselves. The Arkansas Constitution sets a **uniform rate of tax (URT)** 

	Matrix Items	2021 Per Pupil Amt.
	Classroom Teachers	\$2,848
	PE, Art and Music (PAM) Teachers	\$567
	Special Education Teachers	\$397
School-Level	Instructional Facilitators	\$342
Staffing	Librarian/Media Specialist	\$116
	Counselor, Nurse and Other Pupil Support	\$342
	Principal	\$198
	Secretary	\$82
	Technology	\$250
Cabaalianal	Instructional Materials	\$188
School-Level	Extra Duty Funds	\$66
Resources	Supervisory Aides	\$50
	Substitutes	\$72
District Louis	<b>Operations &amp; Maintenance</b>	\$706
District-Level Resources	Central Office	\$439
Resources	Transportation	\$321
Adjustment	Adjustment (retirement)	\$33

of 25 mills from local property tax that must be dedicated to public schools.

URT, however, is not as uniform as it sounds because the value of a mill varies greatly among school districts *and* the number of students the 25 mills covers in each district also varies. The range of results shows the disparity. For instance, at one end is Poyen School District, which raised \$575 per student through URT for the 2021 school year, while the Fountain Lake School District raised \$7,177 per student – so more than the \$7,018 per student called for in the matrix.

Overall, URT accounts for about 39% of school districts' foundation funding. Charter school systems, on the other hand, do not have a tax base, so they contribute nothing to foundation funding through URT.

To make up for the disparity in what local districts and charter school systems are able to raise through URT, Arkansas contributes the next largest portion of foundation funding through the aptly named **State Foundation Funding Aid**. For the 2021 school year, this made up about 60% of foundation funding overall for districts and 100% for charter school systems.

School districts receive about 2% of their foundation funds from **miscellaneous funds** (federal revenue from forest land, grazing rights, etc.) and from the state supplied **"98% adjustment"** to ensure that 98% of a local district's property taxes are covered when tax collections fall short of that rate.

Foundation Funding Component	District Total	% of Total	Charter Total	% of Total
Uniform Rate of Tax (URT)	\$1,246,334,339	38.9%	\$0	0%
State Foundation Funding Aid	\$1,927,320,045	60.1%	\$141,706,492	100%
98% Adjustment	\$20,619,275	0.6%	\$0	0%
Miscellaneous	\$13,537,614	0.4%	\$0	0%
Total	\$3,207,811,273	100%	\$141,706,492	100%

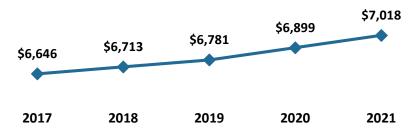
Note: Amounts include overage URT raised by five school districts (Armorel, Fountain Lake, Mineral Springs, Eureka Springs and West Side – Cleburne) that raised more than the foundation funding amount of \$7,018 per student.

Arkansas's matrix is based on a theoretical *school district* of 500 students. This evolved from the prevailing research at the time that showed that schools (not districts) of 500 operated efficiently while providing the necessary resources for an adequate education. (In 2021, 69% of Arkansas schools had fewer than 500 students, while 21% of school districts and public charter school systems did.)

Arkansas legislators converted the per-school funding approach to a per-pupil funding approach with its original matrix.

It is important to keep in mind that the matrix is a *funding tool* that, though it has been used to determine foundation funding for each school year, is not set in statute. Furthermore, while the line-

#### Per Pupil Foundation Funding, 5-Year Trend



item amounts may express legislative intent for spending, the foundation funding that is sent to school districts is considered "unrestricted funding" and may be spent as each school district and charter school system determines.

Funding in the matrix has increased each of the past five years; however, the increases haven't kept up with inflation when adjusted to constant 2021 dollars. **The \$6,646 in 2017 would be the equivalent of \$7,366.56 in 2021.** 



**Survey Says:** 61% of superintendents reported that the matrix moderately or extensively guided spending decisions, while 69% percent said the matrix moderately or extensively guided staffing decisions.<sup>4</sup>

#### Literature Review, Best Practices and State Comparisons

Odden and Picus in 2003 suggested a matrix based on schools with 500 students because the research at the time pointed to that enrollment level as being optimal for supporting the resources needed to provide for an adequate education. More recent research echoes those findings, reporting that economies of scale and also student achievement are optimized in schools with enrollment of 400-

<sup>&</sup>lt;sup>4</sup> See Superintendent's Survey Responses, question 3.

500 students in districts of about 1,300 to about 4,000 students.<sup>5</sup> For instance, the 2018 Evidence-Based approach used by Odden and Picus identifies resources for prototypical elementary, intermediate, and high schools within a prototypical school district of 3,900 students (Appendix A). This aligns with recent National Center for Education Statistics figures reporting the average public school district had 3,768

"Paying schools based on ADM instead of what is required according to standards is a big problem for small schools. Paying per teacher FTE would be more equitable."

– Arkansas superintendent, 2021

students in fall 2018 with an average school size of 513 students. The average elementary school had 478 students and the average secondary school had 499 students (<u>NCES</u>, 2021).

According to Odden and Picus, the formulas and staffing allocations provided by the evidence-based model work for a district down to around 975 students, but school districts below this enrollment require increased staff resources for an adequate program (Appendix B). In 2006, Odden and Picus

wrote in the Arkansas Recalibration Report<sup>6</sup> that "we would suggest that the state strongly consider constructing schools that are of sufficient size to maximize efficiencies in building and maintaining buildings, as well as staffing them with teachers and administrators."

States' primary funding systems for education generally follow two models – student-based foundation funding or resource allocation funding. Some states incorporate a hybrid of the two. Two states use another method, called the guaranteed tax-base model.

Arkansas is one of 34 states to use a foundation formula to determine its per-pupil support for education.<sup>7</sup> Student-based foundation funding formulas can vary. Arkansas's, for instance, is based on a single per-student amount while Alaska's applies different weights to the same per-pupil amount based on school size.

The resource-allocation model is based more on the resources needed at the school level rather than divided into per-pupil funding amounts, and the hybrid model combines the two. For instance, North Carolina funds schools with three basic types of allotments. "Position allotments" guarantees positions for teachers, administrators and instructional support, and the state pays for the cost of these certified personnel based on the state salary schedule. "Dollar allotments" are per-pupil amounts that districts can use for such things as teacher assistants, textbooks, and central office administration. The third source provides funding based on student population categories such as students in poverty.<sup>8</sup>

The guaranteed tax base model uses a formula to equalize the "tax paid on the base amount of property within the district," meaning that the state provides more funding to districts with low property wealth than to ones with high property wealth.<sup>9</sup> Arkansas provides a similar equalization system in the way it distributes State Foundation Funding Aid to schools in the state.

<sup>&</sup>lt;sup>5</sup> Devaraj, S., Faulk, D., and Hicks, M. (Journal of Regional Analyses & Policy, 2018). "School District Size and Student Performance;" Egalite, A. and Kisida, B. (School Effectiveness and School Improvement, 2016) "School size and student achievement: a longitudinal analysis," and Zimmer, T., DeBoer, L. and Hirth, M. (Journal of Education Finance, 2009) "Examining Economies of Scale in School District Consolidation: Assessment of Indiana Districts."

<sup>&</sup>lt;sup>6</sup> Recalibrating The Arkansas School Funding Structure

<sup>&</sup>lt;sup>7</sup> Education Commission of the States: <u>https://reports.ecs.org/comparisons/k-12-funding-01</u> (2021)

<sup>&</sup>lt;sup>8</sup> Ibid.

<sup>&</sup>lt;sup>9</sup> Ibid.

Arkansas ranked 32nd in comparison to other states using all fund sources – local, state and federal – in 2018, according to data obtained from the National Center for Education Statistics and controlled for cost of living differences.

Top NAEP States	<sup>10</sup> Funding Mechanism	<sup>11</sup> 2018 Per Pupil Funding
Massachusetts	Hybrid	\$14,196
New Jersey	Student-based Foundation Formula	\$18,249
New Hampshire	Student-based Foundation Formula	\$16,291
Minnesota	Student-based Foundation Formula	\$15,190
Wyoming	Resource-based Allocation	\$21,348
Virginia	Hybrid	\$12,936
Vermont	Guaranteed Tax Base	\$17,028
Indiana	Student-based Foundation Formula	\$13,976
Connecticut	Student-based Foundation Formula	\$16,832
1 Hada	Churchent based Foundation Formula	\$9,258
Utah	Student-based Foundation Formula	ې <i>55</i> ,256
Top SREB States	Funding Mechanism	Per Pupil Funding (overall)
Top SREB States	Funding Mechanism	Per Pupil Funding (overall)
Top SREB States Virginia	Funding Mechanism Resource-based Allocation	Per Pupil Funding (overall) \$12,936
Top SREB States Virginia Florida	Funding MechanismResource-based AllocationStudent-based Foundation Formula	Per Pupil Funding (overall) \$12,936 \$10,751
Top SREB States Virginia Florida Maryland	Funding MechanismResource-based AllocationStudent-based Foundation FormulaStudent-based Foundation Formula	Per Pupil Funding (overall)           \$12,936           \$10,751           \$13,622
Top SREB States Virginia Florida Maryland North Carolina*	Funding MechanismResource-based AllocationStudent-based Foundation FormulaStudent-based Foundation FormulaResource-based Allocation Model	Per Pupil Funding (overall)           \$12,936           \$10,751           \$13,622           \$10,345
Top SREB States Virginia Florida Maryland North Carolina* Kentucky	Funding MechanismResource-based AllocationStudent-based Foundation FormulaStudent-based Foundation FormulaResource-based Allocation ModelStudent-based Foundation Formula	Per Pupil Funding (overall)           \$12,936           \$10,751           \$13,622           \$10,345           \$13,532
Top SREB States Virginia Florida Maryland North Carolina* Kentucky Georgia	Funding Mechanism         Resource-based Allocation         Student-based Foundation Formula         Student-based Foundation Formula         Resource-based Allocation Model         Student-based Foundation Formula         Hybrid	Per Pupil Funding (overall)           \$12,936           \$10,751           \$13,622           \$10,345           \$13,532           \$13,319

#### COMPARISON OF FUNDING MECHANISMS AND PER-PUPIL FUNDING AMOUNTS

Per Pupil Funding (overall) **Contiguous States Funding Mechanism** \$14,523 Missouri **Student-based Foundation Formula** Tennessee \$11,797 **Resource-based Allocation Model** Texas Student-based Foundation Formula \$11,709 **Student-based Foundation Formula** Oklahoma \$10,732 Arkansas Student-based Foundation Formula \$13,113 Mississippi Hybrid \$11,650 Louisiana Student-based Foundation Formula \$13,645

**Source for Above Charts:** Education Commission of the States: <u>https://reports.ecs.org/comparisons/k-12-funding-01</u> (2021) and National Center for Education Statistics. Funding includes local, state and federal funding are from the National Center for Education Statistics ELSI table generator. Amounts have been adjusted for cost-of-living differences using the Missouri Economic Research and Information Center's Cost of Living Data Series.

About 43 states have public charter schools<sup>12</sup> – entities that contract with a school district or the state to provide a public education while receiving waivers from some of the laws and regulations governing that state's traditional public schools. In most cases, as in Arkansas, the funding mechanism is the same or very similar to the school funding mechanism of the state or, in some cases, the district in

 <sup>&</sup>lt;sup>10</sup> Ibid. (Funding Mechanism for NAEP, SREB, and Contiguous States can be found in Appendix G, H, I respectively.)
 <sup>11</sup> NCES

<sup>&</sup>lt;sup>12</sup> Ziebarth, T., and Bierlein, L. (National Alliance of Public Charter Schools, January 2018) "Measuring Up to the Model: A Ranking of State Funding Laws."

which the charter school is located. Two notable exceptions: Connecticut funds charters with a separate per-pupil amount, and Indiana funds virtual charter schools at 90% the rate of other charter schools.

#### OTHER STATE FUNDING STREAMS FOR EDUCATION

While foundation funding supplies the bulk of money Arkansas schools can use toward providing an adequate education, categorical funding – for the most part – is aimed at ensuring the state supports an equitable education. This is true for funding dollars targeted to students in poverty, to students for whom English is not their first language, and to students who do not perform well in the traditional classroom. These funds – Enhanced Student Achievement, English Language Learner, and Alternative Learning Environment, respectively -- are distributed on a per-pupil basis for each student in each category and are restricted to that specific use. An additional categorical fund supports teachers' professional development.

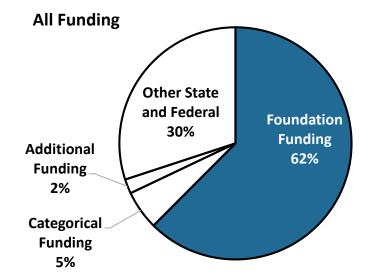
Additional state funds address inequities among school situations. These are called Isolated Funding (distributed to schools meeting strict, statutory definitions of being either isolated or small) and Declining Enrollment or Growth funding (two funding streams that address inequities occurring because of changes in enrollment.)

Several other streams of funds have been added over the years, mainly to help schools meet adequacy requirements: Enhanced Transportation, Additional Enhanced Student Achievement (for poverty students), Special Education High-Cost Occurrences, Additional Professional Development, and two teacher salary supplements. All but the Enhanced Transportation dollars are considered restricted.

Because these latter funding streams have been created since passage of the 2007 "adequacy study statute,"<sup>13</sup> their review is not statutorily required. However, to provide a more holistic picture of state funding for adequacy and equity, this funding is included in this study. The expenditures of those funds will also be

addressed in the upcoming report on expenditures.

The following sections will look at the specific funding levels set within the matrix, within each of the categorical funds, and within each additional stream of funds.



\*Data percentages based on 2019-2020 Annual Statistical Report and State Aid Notice

<sup>&</sup>lt;sup>13</sup> Act 1204 of 2007 (as amended by later acts)

#### FOUNDATION FUNDING (THE MATRIX)

Funding information for each resource listed in the matrix is provided in the following sections according to the three-part matrix structure. A summary of the 2021 per-pupil funding for each item and the percentage of total matrix funding for each can be found in Appendix M.

#### **School-Level Staffing**

The first component of the matrix is schoollevel staffing, which includes classroom teachers, pupil support staff, one principal, and one school-level secretary, for a total of 35.69 school-level full-time employees (FTEs). This section of the matrix constitutes \$4,893.31 of the per-pupil funding amount, or 69.7% of all foundation funding.

Unlike other parts of the matrix, the schoollevel staffing section is made up of the number

School-Level Staffing Matrix Items	FTEs
Classroom Teachers	20.8
PE, Art and Music (PAM) Teachers	4.14
Special Education Teachers	2.9
Instructional Facilitators	2.5
Librarian/Media Specialist	.85
Counselor, Nurse and Other Pupil Support	2.5
Principal	1.0
Secretary	1.0
Total	35.69

of each type of staff and the salary and benefits for each of those employees. In 2020-21, the perstudent funding amount was calculated using a salary of \$68,470 (including benefits) for teachers and other pupil support staff. The principal funding amount was calculated using a salary of \$99,012 (including benefits), and the school secretary funding amount used a salary of \$40,855 (including benefits).

#### Classroom Teachers

In Arkansas, core classroom teachers are funded according to the number required to meet the average class sizes established in the DESE Rules Governing Class Size and Teaching Load<sup>14</sup>. These are different for kindergarten teachers, teachers in grades 1-3, and teachers in grades 4-12. Non-core teachers, also referred to as "specialist teachers," are funded based on the number of non-core teachers needed at 20% of the total core teachers. In all, 24.94 core and non-core classroom teachers are included in the matrix for every 500 students. School districts and charter schools may apply for and receive waivers from state rules regarding both class size and minimum teacher salaries; receiving such waivers does not affect funding levels.



**Survey Says:** 80% of superintendents reported that their districts were in moderate or extreme need of more funding for classroom teachers.<sup>15</sup>

Classroom teachers constitute \$3,416 of the per-pupil foundation funding amount, just under half of the total per pupil amount.

Classroom Teachers	2021/ 2022/ 2023	2021 Funding Amount
Kindergarten	\$274 / \$280 / \$286	\$130,474,241
Grades 1-3	\$685 / \$700 / \$716	\$326,185,602
Grades 4-12	\$1,890 / \$1,932 / \$1,976	\$900,272,263
PE, Art, and Music (PAM) Teachers	\$567 / \$580 / \$593	\$270,081,679

<sup>&</sup>lt;sup>14</sup> DESE Rules Governing Class Size and Teaching Load

<sup>&</sup>lt;sup>15</sup> See Superintendents Survey Responses, question 4.

#### Kindergarten Teachers

In 2021, funding for kindergarten teachers accounted for 3.9% of foundation dollars.

<b>2021</b> / 2022/ 2023	2021 Funding Amount
<b>\$274</b> / \$280 / \$286	\$130,474,241

The matrix funds two core kindergarten teachers for the prototypical K-12 school of 500 students, and DESE Rules call for an average kindergarten class size of 20. However, kindergarten classes are allowed to reach a total of 22 students if a half-time instructional aide is present.

2021 Matrix Teacher-Student Ratio	District Avg. Class Size Range	Charter Avg. Class Size Range	Evidence-Based Model*	
1:20	5-23	7-29**	1:15	
* Odden, Allan, & Picus, Lawrence O. (2019). School finance: A policy perspective, 6 <sup>th</sup> ed. New York: McGraw-Hill				

Source: 2020 SY math class size data from APSCN \*\*Virtual school

#### Teachers Grades 1-3

In 2021, funding for teachers in grades 1-3 accounted for 9.7% of foundation dollars.

<b>2021</b> / 2022/ 2023	2021 Funding Amount
<b>\$685</b> / \$700 / \$716	\$326,185,602

The matrix funds five core teachers for grades 1-3 for the prototypical K-12 school of 500 students, and DESE Rules call for an average class size of 23 with no more than 25 students per teacher.

2021 Matrix	Evidence-Based
Teacher-Student Ratio	Model*
1:23	1:15

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

Grade Level	District Avg. Class Size Range	Charter Avg. Class Size Range
1 <sup>st</sup>	1*-27	5-44*
2 <sup>nd</sup>	2*-26	8-33*
3 <sup>rd</sup>	2*-27	8*-106*

Source: 2020 SY math class size data from APSCN \*Virtual school

#### Matrix/Teachers Grades 4-12

In 2021, funding for teachers in grades 4-12 accounted for 26.9% of foundation dollars.

<b>2021</b> / 2022/ 2023	2021 Funding Amount	
<b>\$1,890</b> / \$1,932 / \$1,976	\$900,272,263	

The matrix funds 13.8 core teachers for grades 4-12 for the prototypical K-12 school of 500 students. For grades 4-6, DESE Rules call for an average class size of 25 with no more than 28 students per teacher. With the exception of classes that lend themselves to large group instruction, the Rules stipulate that individual classes shall not exceed 30 students in grades 7-12; however, an average class size is not specified.

2021 Matrix	Evidence-Based
Teacher-Student Ratio	Model*
1:25	1:25

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

Grade Level	District Avg. Class Size Range	Charter Avg. Class Size Range
4 <sup>th</sup>	2-32	3-126*
5 <sup>th</sup>	3*-28	7-158*
6 <sup>th</sup>	1*-29	2-81*
<b>7</b> <sup>th</sup>	1-29	5-119*
8 <sup>th</sup>	2*-28	5-125*
9 <sup>th</sup>	1-28	1-64*
10 <sup>th</sup>	1-27	5-62*
11 <sup>th</sup>	1-27	1-91*
12 <sup>th</sup>	1-28	1-32*

Source: 2020 SY 4<sup>th</sup> grade math and 5<sup>th</sup>-12<sup>th</sup> English class size data from APSCN \*Virtual school

#### PE, Art and Music (PAM) Teachers

In 2021, funding for PAM teachers accounted for 1.4% of foundation dollars.

<b>2021</b> / 2022/ 2023	2021 Funding Amount
<b>\$567</b> / \$580 / \$593	\$270,081,679

The matrix funds 4.14 specialist teachers who teach non-core academic subjects such as art, music, and physical education, and help to provide teachers of core academic subjects time for professional development, planning and preparation. According to state accreditation standards, courses that lend themselves to large group instruction - as do many PAM courses -can exceed 30 students in grades 7-12.

Classroom Teachers	2021 Matrix Teacher-Student Ratio	Evidence-Based Model*
PE, Art, and Music (PAM)		5.2:450 elementary school
Teachers	4:500	3.6:450 middle school
		8.0:600 high school

#### Literature Review, Best Practices and State Comparisons

The 2018 Odden and Picus evidence-based model<sup>16</sup> provides for a total core and elective teaching staff of 31.2 and 21.6 for the prototypical 450-student elementary and middle school, respectively, and 32 for the prototypical 600-student high school, which are consistent with the recommendations made for the development of Arkansas's matrix.

The evidence-based model's core teaching staff recommendations are based on the number of teachers needed to meet effective class sizes. The intent is to provide core teaching positions for actual class sizes of 15 in grades K-3 and 25 in higher grades. All other instructional staff are resourced above that level. In addition to core classroom teachers, elective or specialist (non-core) teacher staffing recommendations are provided in the evidence-based model using a percent of total core teachers. This

<sup>&</sup>lt;sup>16</sup> Odden, Allan, & Picus, Lawrence O. (2019). "School finance: A policy perspective." 6<sup>th</sup> ed. New York: McGraw-Hill

is to enable schools to offer a comprehensive curriculum and to provide teachers the time required to engage in collaborative planning to review student data, design standards-based lesson and curriculum plans, and identify interventions for struggling students.

According to the 2020 Arkansas School Finance Study<sup>17</sup> conducted by Augenblick, Palaich and Associates (APA), literature review findings all point to lower student-to-teacher ratios for K-3 grades than what is currently funded through the matrix. The report also indicated that evidence-based studies and other national adequacy studies suggest a 15:1 ratio. While specific sources were not provided, APA indicates that national studies identify the need for 33% more staff above core teaching staff, which is consistent with the evidence-based model recommendations.

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

The Arkansas Joint Legislative Committee on Educational Adequacy chose to base the matrix on the state's class size standards, which have a higher student-to-teacher ratio in grades K-3 than the evidence-based model recommends. A summary table displaying the difference between current Arkansas policy and the evidence-based model recommendations is provided below.

Core and Non-Core Teachers				
Matrix Item: Classroom Teachers	Matrix FTE: All grades	Evidence-Based Model FTE: 450- student prototypical elementary school	Evidence-Based Model FTE: 450- student prototypical middle school	Evidence-Based Model FTE: 600- student prototypical high school
Core: English Language Arts, Math, Social Studies and Science	20.8	26	18	24
Non-Core: PE, Art, Music and other electives	4.14 20% of Core	5.2 20% of Core	3.6 20% of Core	8 33 1/3 of Core
Total	24.94 FTE	31.2 FTE	21.6 FTE	32 FTE

#### Special Education Teachers

The matrix funds 2.9 special education teachers for the prototypical K-12 district of 500 students, meaning that the state funds special education based on each district's or charter's total number of students, rather than on the total number of students with disabilities. Districts also receive special education high-cost occurrence funding for students with higher cost special education expenses. That funding will be reviewed in a later section of this report. In 2021, 66,279 students with disabilities attended public schools in Arkansas. This number has increased by about 11% since 2017 while the number of special education teachers funded in the matrix has remained at 2.9 FTEs per 500 students.

The Special Education and Related Services Program Standards Rules set maximum teacher-tostudent caseloads ranging from 1:6 to 1:45, depending on the type of classroom or services (e.g. regular classroom, resource services, or special class services) and other staff assistance (e.g. paraprofessional, speech/language pathologist, or co-teacher). Districts and charter school systems may not apply for

<sup>&</sup>lt;sup>17</sup> Arkansas School Finance Study (APA, 2020)

waivers from laws and rules regulating special education programs; however, teacher salary waivers would apply to these personnel. Again, these waivers do not affect funding levels.

In 2021, funding for special education teachers accounted for 5.7% of foundation dollars.

<b>2021</b> / 2022/2023	2021 Total	2021 Matrix Teacher-	Evidence-Based
Per Student Amount	Amount	Student Ratio	Model*
<b>\$397 /</b> \$406 / \$414	\$189,187,649	2.9:500	4.05:500

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

extreme need of more funding for special education teachers.<sup>18</sup>

#### Literature Review and Best Practices

States receive some federal funds to provide special education services but are primarily responsible for funding special education services in their respective states. A 2019 report for the National Education Policy Center noted that no single funding mechanism is best as each state has to take into consideration its unique needs.<sup>19</sup>

Survey Says: 83% of superintendents reported that their districts were in moderate or

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

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

<sup>&</sup>lt;sup>18</sup> See Superintendents Survey Responses, question 4.

<sup>&</sup>lt;sup>19</sup> Funding Special Education: Charting a Path That Confronts Complexity and Crafts Coherence. (June 2019). National Education Policy Center.

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

The following table shows a list of the various funding mechanisms for special education as noted by the Education Commission of the States as well as a brief description of each. In most analyses, Arkansas is considered to fund special education for high-cost students only. This is likely due to the fact that the majority of state funding for special education comes through foundation funds which does not restrict any dollars for special education only. On the other hand, APA considers Arkansas's inclusion of special education funding method a census-based funding model for special education because it presumes that districts have similar percentages of special education students and those students have similar levels of special education needs.

Funding Mechanism	General Description
Flat Weight	A single weight or dollar amount allocated by the state for students or districts that qualify based on certain factors or student needs. Allocations determined by flat weights do not vary based on specific program needs or student characteristics.
Multiple Student Weights	More than one weight or dollar amount is allocated by the state based on certain factors or student needs. States vary the amount allocated based on student need.
Census-Based	The state allocates funds to each district based on an assumed level of enrollment, regardless of the district's actual demographics. This type of funding can be used in foundation formula model funding and resource allocation model funding.
Resource-Based Allocation	All districts receive a minimum base amount of resources. Resources could be staffing, services or programs, and are often based on a ratio of staffing to students.
Reimbursement	Districts submit receipts of eligible expenditures to the state, and the state reimburses districts for all or a portion of those expenditures.
High-Cost	This type of funding is often coupled with other funding distribution methods, and funds can be distributed as grants or reimbursements.
Categorical Grant	The state distributes funds based on student characteristics or program needs to districts that demonstrate eligibility and/or a need for funding.
Hybrid	The state distributes funds using two or more funding mechanisms.

Source: Education Commission of the States (2021).

Cost

The following tables show the special education funding mechanisms used by the top-performing NAEP performing states, top SREB states, and the contiguous states including Arkansas. Among all groupings of states, the most common mechanism was some sort of weighting system. Additionally, half of the top-performing NAEP states had some combination of multiple methods that often included high-cost.

**Funding Mechanism** 

Massachusetts	Hybrid: Census-Based and High-Cost
New Jersey	Hybrid: Census-Based and High Cost
New Hampshire	Hybrid: Flat Weight and High-Cost
Minnesota	Hybrid: Reimbursement, Multiple Student Weights, and High-Co
Wyoming	Reimbursement
Virginia	Resource Allocation Model
Vermont	Hybrid: Census-based and Categorical Grant
Indiana	Multiple Student Weights
Connecticut	High-Cost
Utah	Multiple Student Weights

Source: Education Commission of the States (2021).

**Top NAEP States** 

Top SREB States	Funding Mechanism
Virginia	Resource Allocation Model
Florida	Multiple Student Weights
Maryland	Flat Weight
North Carolina	Flat Weight*
Kentucky	Multiple Student Weights
Georgia	Multiple Student Weights
Tennessee	Resource-Based Allocation
Texas	Multiple Student Weights

Source: Education Commission of the States (2021).

\*Funding mechanism as of 2019 since data was not available for North Carolina for 2021.

Contiguous States	Funding Mechanism			
Missouri	Flat Weight			
Tennessee	Resource-Based Allocation			
Texas	Multiple Student Weights			
Oklahoma	Multiple Student Weights			
Arkansas	Foundation Funding and High-Cost			
Mississippi	Hybrid: Resource-Based Allocation and High-Cost			
Louisiana	Flat Weight			

Source: Education Commission of the States (2021).

#### Instructional Facilitators

In 2021, funding for instructional facilitators accounted for 4.9% of foundation dollars.

<b>2021 / 2022/2023</b>	2021
Per Student Amount	Total Amount
<b>\$342 /</b> \$350 / \$358	\$163,092,801

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

2021 Matrix Teacher-Student Ratio	District Ratio	Charter Ratio	Evidence-Based Model*
2.5:500	2.4:500	1.7:500	2.25:450 elementary and middle schools
			3:600 high schools

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



**Survey Says:** 67% of superintendents reported that their districts were in moderate or extreme need of more funding for instructional facilitators.

#### Literature Review and Best Practices

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

#### Librarians-Media Specialists

In 2021, funding for librarian/media specialists accounted for 1.7% of foundation dollars.

<b>2021</b> / 2022/2023	2021
Per Student Amount	Total Amount
<b>\$116 /</b> \$119 / \$122	\$55,451,552

Bureau of Legislative Research - Adequacy Study

The matrix funds 0.85<sup>20</sup> librarian/media specialists for the prototypical K-12 school of 500 students. The state's Standards for Accreditation<sup>21</sup> call for public schools with fewer than 300 students to employ at least one half-time library media specialist, while schools with 300 or more students must employ at least one full-time library media specialist. Schools with 1,500 or more students are required to employ at least two full-time library media specialists; however, waivers are granted from this accreditation standard. No adjustment to funding is made due to waivers.

2021 Matrix Teacher-Student Ratio	District Ratio	Charter Ratio	Evidence-Based Model*
.85:500	.97:500	.04:500	1:450 elementary and middle schools 1:600 high school

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



**Survey Says:** 34% of superintendents reported that their districts were in moderate or extreme need of more funding for librarians-media specialists.<sup>22</sup>

#### Literature Review and Best Practices

In 2012, Colorado conducted a study using data from 2005-2011 that showed that students with access to licensed librarians working full time perform better on state reading assessments.<sup>23</sup> The Odden and Picus evidence-based model provides for 1.0 library/media FTE position for each prototypical school, which is based on best practices. The findings from data collected by the National Center for Education Statistics through the survey of school libraries conducted in 2011-2012 show the evidence-based model recommendation is appropriate.<sup>24</sup>

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

#### School Counselor, Nurse, and Other Pupil Support

The matrix funds 2.5 pupil support staff for guidance counselors, nurses, and other pupil support. Pursuant to A.C.A. § 6-18-706, 0.67 of the 2.5 positions must be a school nurse.

<sup>&</sup>lt;sup>20</sup> This calculation was originally based on the actual number of FTE library media specialists required in the state for 2005-2006, not on a 500-student prototypical school.

<sup>&</sup>lt;sup>21</sup> Arkansas Division of Elementary and Secondary Education Rules Governing Standards for Accreditation of Arkansas Public Schools, Effective Date: July 1, 2020

<sup>&</sup>lt;sup>22</sup> See Superintendents Survey Responses, question 4.

<sup>&</sup>lt;sup>23</sup> Lance, K. C., & Hofschire, L. (2012, January). Change in school librarian staffing linked with change in CSAP reading performance, 2005 to 2011 [Closer Look]. Retrieved from Library Research Service website: http://www.lrs.org/documents/closer\_look/CO4\_2012\_Closer\_Look\_Report.pdf

<sup>&</sup>lt;sup>24</sup> Odden, Allan, & Picus, Lawrence O. (2019). School finance: A policy perspective, 6th ed. New York: McGraw-Hill

#### **Guidance Counselors**

In 2021, funding for guidance counselors accounted for 2.1% of foundation dollars.

<b>2021</b> / 2022/ 2023	2021 Total Amount
<b>\$152</b> / \$155 / \$159	\$72,413,204

The matrix funds 1.11 guidance counselors for every 500 students. The state's Standards for Accreditation require districts to have at least one counselor for every 450 students, which equates to approximately 1.1 FTEs per 500 students (4-E.2). Districts are eligible to receive a waiver from this accreditation standard; funding is not adjusted when these waivers are granted.

2021 Matrix	District	Charter	Evidence-Based Model*
Teacher-Student Ratio	Ratio	Ratio	
1.11:500	1.4:500	.7:500	1:450 grades K-5 1:250 grades 6-12

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



**Survey Says:** 56% of superintendents reported that their districts were in moderate or extreme need of more funding for guidance counselors.<sup>25</sup>

#### Literature Review and Best Practices

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

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

#### Nurses

In 2021, funding for nurses accounted for 1.3% of foundation dollars.

2021/2022/2022	2021
<b>2021</b> / 2022/ 2023	Total Amount
<b>\$92</b> / \$94 / \$96	\$43,708,871

The matrix funds .67 FTE nurse for every 500 students. State law requires districts to have at least one nurse per 750 students (§ 6-18-706(c)(1)). The law also notes that districts with "a high concentration of children with disabling conditions as determined by the State Board of Education ... should" have a nurse-to-student requirement of 1:400. In districts that "provide a center for profoundly

<sup>&</sup>lt;sup>25</sup> See Superintendents Survey Responses, question 4.

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)).

2021 Matrix District Teacher-Student Ratio Ratio		Charter Ratio	Evidence-Based Model*
.67:500	1.1:500	.6:500	1:750

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

**Survey Says:** 61% of superintendents reported that their districts were in moderate or extreme need of more funding for nurses.<sup>26</sup>

#### Literature Review and Best Practices

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

#### Other Student Support

In 2021, funding for other student support personnel accounted for 1.4% of foundation dollars.

The matrix funds 0.72 FTE positions for other student support, which includes psychological

<b>2021</b> / 2022/ 2023	2021 Total Amount
<b>\$99 /</b> \$101 / \$103	\$46,970,727

services, social work services, speech pathology services and audiology services. While there are no specific state standards requiring these individual services, Arkansas accreditation standards do require school districts to "offer a full continuum of special education services as required by the Individuals with Disabilities Education Act" (2-F.2). Schools are required to provide some of these services for special education students whose individualized education program (IEP) calls for them.

2021 Matrix	District	Charter	Evidence-Based Model*
Teacher-Student Ratio	Ratio	Ratio	
.72:500	.92:500	.86:500	See additional funding needs section

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

**Survey Says:** 59% of superintendents reported that their districts were in moderate or extreme need of more funding for other student support.<sup>27</sup>

<sup>&</sup>lt;sup>26</sup> See Superintendents Survey Responses, question 4.

<sup>&</sup>lt;sup>27</sup> See Superintendents Survey Responses, question 4.

#### Principal

Arkansas's standards call for one half-time principal, at least, for schools with fewer than 300 students. Of the 313 schools with enrollment of 299 or lower in 2021, 175 employed at least one full-time equivalent principal. The funding matrix, however, funds a full-time principal with a salary and benefits totaling \$99,012 – *if* a school has 500 or more students. Only 31% of Arkansas schools met this enrollment level in 2021. Districts may apply for waivers from the rules regarding principals and their licensure. Funding remains the same when waivers are in effect.

In 2021, funding for principals accounted for 2.8% of foundation dollars.

<b>2021</b> / 2022/2023	2021 Total	District	Charter	Evidence-Based Model**
Per Student Amount	Amount	Ratio	Ratio	
<b>\$198 /</b> \$203 / \$208	\$94,373,255	1.1:500	.9:500	1:450 elementary and middle schools; 1 and 1 asst. principal high school

\*2020 Standards for Accreditation

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



**Survey Says:** 47.5% of superintendents reported that their districts were in moderate or extreme need of more funding for principals.<sup>28</sup>

#### Literature Review and Best Practices

Little research has been done on the appropriate ratio of administrators to students; however, a study of schools in Indiana found that higher performing schools had lower administrator-to-student ratios.<sup>29</sup> Other studies have found that principals' duties can number up to 42 individual responsibilities,<sup>30</sup> but the Indiana study found that higher achievement was associated with those schools where principals kept a majority of "organizational duties" for themselves (hiring and developing teachers and budget planning, for instance) while delegating to assistants other common administrative duties such as student discipline and managing school facilities.

Studies of characteristics of successful and improving schools point to leadership that holds staff accountable while also inspiring and supporting them, especially in the areas of teaching and learning. The concept of shared leadership, in which principals seek and incorporate ideas from staff is also found to be integral to higher performing schools.<sup>31</sup>

<sup>&</sup>lt;sup>28</sup> See Superintendents Survey Responses, question 4.

<sup>&</sup>lt;sup>29</sup> McCaffrey, C. (Doctoral Research Paper, Ball State University, May 2014) "Investing the Connection of the Student-to-Administrator Ratio and Administrative Roles in Indiana Public High Schools."

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

<sup>&</sup>lt;sup>31</sup> Craig, J. et al. (Appalachia Educational Laboratory at Edvantia, 2005) "A Case Study of Six High-Performing Schools in Tennessee;" (The Center on School Turnaround at WestEd, 2017) "Four Domains for Rapid School Improvement: A System Framework;" and (Hanover Research, 2014) "Best Practices for School Improvement Planning."

#### Secretary

In 2021, funding for secretaries accounted for 1.2% of foundation dollars. The school-level secretary amount was calculated using a salary of \$40,855.

<b>2021</b> / 2022/2023 Per Student Amount	2021 Total Amount	Matrix	District Ratio	Charter Ratio	Evidence-Based Model*
<b>\$82 /</b> \$82 / \$84	\$38,921,226	1 / school	2:500	1.3:500	<ul><li>2:450 elementary and middle schools</li><li>3:600 high schools</li></ul>

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



**Survey Says:** 40% of superintendents reported that their districts were in moderate or extreme need of more funding for secretaries.<sup>32</sup>

#### Literature Review and Best Practices

The 2020 Arkansas study report provided by APA indicated the current funding of 1.0 secretary FTE is below recommendations and agrees with feedback from the past evidence-based studies conducted for Arkansas, other adequacy studies, and stakeholder engagement. APA reported that case study schools with 400 or more students generally have at least 2.0 FTE secretaries.

#### School-Level Resources

The second component of the matrix contains both staff and material resources schools need to operate effectively. These five line items are funded with specific per-pupil dollar amounts. Together, this section of the matrix accounted for \$625.90 of the per-pupil funding amount, or 8.9%, of total foundation funding.

School-Level Resources	2021
Matrix Items	Per Pupil Amt.
Technology	\$250
Instructional Materials	\$188
Extra Duty Funds	\$66
Supervisory Aides	\$50
Substitutes	\$72
Total	\$626

#### Technology

In 2021, funding for technology accounted for 3.6% of foundation dollars.

<b>2021</b> / 2022/2023 Per Student Amount	2021 Total Amount	Evidence-Based Model*
<b>\$250 /</b> \$250 / \$250	\$119,098,000	\$250 but, if 1-1, \$400

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



**Survey Says:** 61% of superintendents reported that their districts were in moderate or extreme need of more funding for technology.<sup>33</sup>

<sup>&</sup>lt;sup>32</sup> See Superintendents Survey Responses, question 4.

<sup>&</sup>lt;sup>33</sup> See Superintendents Survey Responses, question 4.

#### Literature Review and Best Practices

In their latest evidence-based study, Odden and Picus kept the \$250-per-student technology funding amount they had recommended for more than a decade, with the following breakdown: \$71 for computer hardware; \$72 for operating systems, productivity and non-instructional software; \$55 for network equipment, printers and copiers; and \$52 for instructional software and additional classroom hardware. The recommendation for \$250 is for school districts and charter systems equipping their schools at 3:1 or 2:1 computer-student ratio. They recommend \$400 per student when a 1:1 ratio is in effect. While Odden and Picus remain neutral on the educational benefit of 1:1, they do point out that increased online standardized testing, especially as it more frequently occurs in lower grades, makes it more necessary for students to feel comfortable learning and testing in a digital environment. They also point out that 1:1 and digital learning depends greatly on students' ability to access the Internet while at home.

#### Instructional Materials

In 2021, funding for instructional materials accounted for 2.7% of foundation dollars.

<b>2021 /</b> 2022/2023 Per Student Amount	2021 Total Amount	Evidence-Based Model Per-Student Amounts*
<b>\$188 /</b> \$193 / \$197	\$89,514,057	\$225: \$170 (instructional) \$30 (library) \$25 (interim assessments)

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

**Survey Says**: 62% of superintendents reported that their districts were in moderate or extreme need of more funding for instructional materials.<sup>34</sup>

#### Literature Review and Best Practices

Textbooks are needed unless a school district or charter school system truly supplies every student with a computer (and, ideally, the student has ready, reliable broadband access at home). Odden and Picus put the costs of high school text books at \$80 to \$140 per book. They also recommend a six-year review of text books to keep curricula up to date. <sup>35</sup>

#### Extra Duty Funds

Extra duty funds are funds schools use to pay stipends for teachers who coach athletics and those who supervise after-school clubs or other extracurricular activities. In 2021, funding for extra duty funds accounted for 1% of foundation dollars.

<b>2021</b> / 2022/2023 Per Student Amount	2021 Total Amount	
<b>\$66 /</b> \$68 / \$70	\$31,537,150	



**Survey Says:** 63% of superintendents reported that their districts were in moderate or extreme need of more funding for extra duty.<sup>36</sup>

<sup>&</sup>lt;sup>34</sup> Ibid.

 <sup>&</sup>lt;sup>35</sup> Odden, A. and Picus, L. (2019). *School finance: A policy* perspective, 6<sup>th</sup> ed. New York: McGraw-Hill
 <sup>36</sup> See Superintendents Survey Responses, question 4.

#### Literature Review and Best Practices

No common model exists for allocating state support for student activities. Neither is there a model that recognizes the higher costs faced by small schools and districts due to longer travel distances.<sup>37</sup>

Extracurricular activities have a number of benefits for students, including better academic performance, reduced rates of dropout, positive school perceptions, and high self-esteem. <sup>38</sup>

According to APA's 2020 Arkansas study, other state adequacy studies have not addressed extra duty funds. In APA's educator panels and stakeholder surveys, participants indicated that the amounts should be revisited in light of minimum wage increases.<sup>39</sup> In 2018, Arkansas voters approved a ballot measure gradually increasing the hourly minimum wage from \$8.50 to \$11 by 2021.<sup>40</sup>

#### Matrix/Supervisory Aides

Supervisory aides are staff who help students gets on and off buses in the morning and afternoon and who supervise lunch and recess periods. In 2021, funding for supervisory aides accounted for 0.7% of foundation dollars.

<b>2021</b> / 2022/2023 Per Student Amount	2021 Total Amount	Evidence-Based Model <sup>41</sup>
<b>\$50/</b> \$51/ \$53	\$23,819,600	1:225 for elementary and middle; 1:200 for high school



**Survey Says:** 59% of superintendents reported that their districts were in moderate or extreme need of more funding for supervisory aides.<sup>42</sup>

#### Literature Review and Best Practices

While schools need staff for non-instructional responsibilities like lunch duty, hallway monitoring, before and after school playground supervision, and others, research does not support the use of supervisory aides to be used as general teachers' helpers.<sup>43</sup> These "instructional aides" in a regular-sized classroom do not positively impact student achievement.<sup>44</sup>

According to APA's 2020 Arkansas study, other state adequacy studies have not addressed supervisory aides. In APA's educator panels and stakeholder surveys, participants indicated that the

<sup>&</sup>lt;sup>37</sup> Odden, A. and Picus, L. (December 2020) "The 2020 Recalibration of Wyoming's Education Resource Block Grant Model Final Report."

<sup>&</sup>lt;sup>38</sup> Odden, A. and Picus, L. (December 2020) "The 2020 Recalibration of Wyoming's Education Resource Block Grant Model Final Report;" Feldman, A. and Matjasko, J. (Review of Educational Research, Summer 2005.) "The Role of School-Based Extracurricular Activities in Adolescent Development: A Comprehensive Review and Future Directions;" and Knop, B. and

Siebens, J. (U.S. Census Bureau, November 2018). "A Child's Day: Parental Interaction, School Engagement, and Extracurricular Activities: 2014."

<sup>&</sup>lt;sup>39</sup> Odden, A. and Picus, L. (Presentation to the Senate Committee and Education and the House Committee on Education, October 19, 2020.) "Review of the Resource Matrix."

<sup>&</sup>lt;sup>40</sup> Arkansas Department of Labor and Licensing, "Minimum Wage and Overtime,"

https://www.labor.arkansas.gov/divisions/labor-standards/minimum-wage-and-overtime/, accessed September 29, 2021. <sup>41</sup> Odden, A. and Picus, L. (2019). *School finance: A policy perspective*, 6<sup>th</sup> ed. New York: McGraw-Hill.

<sup>&</sup>lt;sup>42</sup> See Superintendents Survey Responses, question 4.

<sup>&</sup>lt;sup>43</sup> Odden, A. and Picus, L. (2020). "The 2020 Recalibration of Wyoming's Education Resource Block Grant Model Final Report."

<sup>&</sup>lt;sup>44</sup> Gerber, S., Finn, J., Achilles, C. and Boyd-Zaharias, J. (Educational Evaluation and Policy Analysis, Summer 2001.) "Teacher Aides and Students' Academic Achievement."

amounts should be revisited in light of minimum wage increases.<sup>45</sup> As noted above, Arkansas's minimum wage increased between 2018 and 2021 from \$8.50 to \$11.

#### Substitutes

In 2021, funding for substitutes accounted for 1% of foundation dollars.

<b>2021</b> / 2022/2023 Per Student Amount	2021 Total Amount	
<b>\$72/</b> \$74/ \$75	\$34,204,946	



**Survey Says:** 75% of superintendents reported that their districts were in moderate or extreme need of more funding for substitutes.<sup>46</sup>

#### Literature Review and Best Practices

Many states provide funding for about 10 days for each teacher, similar to companies and government providing one sick day per month for employees.<sup>47</sup>

According to APA's 2020 Arkansas study, other state adequacy studies have not addressed substitutes. In APA's educator panels and stakeholder surveys, participants indicated that the amounts should be revisited in light of minimum wage increases.<sup>48</sup> As noted above, Arkansas's minimum wage increased between 2018 and 2021 from \$8.50 to \$11.

#### **District-Level Resources**

The third component of the matrix includes the resources necessary for districts' operations and maintenance, central office, and transportation. The \$1,466 total represents 21.9% of overall foundation funding.

District-Level Resources	2021 Per
Matrix Items	Pupil Amt.
<b>Operations &amp; Maintenance</b>	\$706
Central Office	\$439
Transportation	\$321
Total	\$1,466

#### **Operations and Maintenance**

Operations and maintenance includes the staff and other resources necessary to maintain school facilities and grounds and to keep school buildings clean, heated, and cooled. The funding level is based on 9% of foundation funding, plus the cost of property insurance. Since 2009, the O&M rate has increased every year **except** 2017, but at different rates of change than the overall foundation funding rate per-student.

<sup>&</sup>lt;sup>45</sup>Odden, A. and Picus, L. (Presentation to the Senate Committee and Education and the House Committee on Education, October 19, 2020). "Review of the Resource Matrix."

<sup>&</sup>lt;sup>46</sup> See Superintendents Survey Responses, question 2.

 <sup>&</sup>lt;sup>47</sup> Odden, A. and Picus, L. (2020). "The 2020 Recalibration of Wyoming's Education Resource Block Grant Model Final Report.".
 <sup>48</sup> Odden, A. and Picus, L. (Presentation to the Senate Committee and Education and the House Committee on Education, October 19, 2020). "Review of the Resource Matrix."

2021 / 2022/2023 Per Student Amount	2021 Total Amount	Evidence-Based Model*
\$706 / \$723 / \$741		<ul> <li>Different formulas for the positions listed below.</li> <li>2.8 Custodians</li> <li>Maintenance</li> <li>0.82 Groundskeepers</li> <li>Total: 4.62 M&amp;O personnel salaries for a 500-student prototypical school + \$116.73 per pupil for materials and supplies</li> </ul>

DESK AUDIT OF THE ARKANSAS SCHOOL FUNDING MATRIX, \*Odden, Allan, & Picus, Lawrence O. (2014).



**Survey Says:** 77% of superintendents reported that their districts were in moderate or extreme need of more funding for operations and maintenance.<sup>49</sup>

#### Literature Review and Best Practices

The Odden and Picus evidence-based model provides formulas to compute the number of custodians needed at the school level, maintenance staff at the district level, and groundskeepers at the school and district level, as well the costs of materials and supplies to support all operation and maintenance activities. These formulas vary, but all take into account the number of teachers, student classrooms, and gross square feet (GSF). The formulas used by the evidence-based model, and more specifically as applied to Arkansas in 2014 by Odden and Picus, are not used by the state to calculate funding levels.

#### Central Office

The matrix funds \$438.8 per student for central office expenses. These expenses include the salaries and benefits of the superintendent, administration personnel (legal, fiscal, human resources,

<b>2021</b> / 2022/2023	2021 Total
Per Student Amount	Amount
<b>\$439 /</b> \$448 / \$457	\$209,040,810

communications, etc.), certain district instructional and pupil support directors, and clerical staff. It also includes funding for activities of the local school board. Arkansas Standards of Accreditation require a full-time superintendent to oversee all operations of the public school district.<sup>50</sup> Waivers from the rules regarding superintendents may be applied for, but receiving such a waiver does not impact foundation funding for school districts or charter systems.

In 2021, funding for central office accounted for 14% of foundation dollars.



**Survey Says:** 51% of superintendents reported that their districts were in moderate or extreme need of more funding for central offices.<sup>51</sup>

#### Literature Review and Best Practices

The Odden and Picus evidence-based model is based on multiple school district size assumptions shown in Appendix C. Odden and Picus provide recommendations based on a 3,900 student district. These recommendations include eight administration positions and fifteen classified

<sup>&</sup>lt;sup>49</sup> See Superintendents Survey Responses, question 4.

<sup>&</sup>lt;sup>50</sup> Arkansas Division of Elementary and Secondary Education Rules Governing Standards for Accreditation of Arkansas Public Schools and School Districts. (July 2020).

<sup>&</sup>lt;sup>51</sup> See Superintendents Survey Responses, question 4.

positions. They also recommend a per-student dollar amount of \$300 to account for other costs that include, but are not limited to, insurance, purchased services, materials and supplies, equipment, association fees, elections, districtwide technology, and communications.

#### Transportation

While state law does not require school districts to provide transportation for students, funding is provided in the matrix. In 2021, funding for transportation accounted for 4.6% of foundation dollars.

<b>2021</b> / 2022/2023 Per Student Amount	2021 Total Amount	Evidence-Based Model*
<b>\$321 /</b> \$321 / \$321	\$153,017,110	No specific dollar amount, but recommends providing aid on a categorical basis based on a defined formula.

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



Survey Says: 78% of superintendents reported that their districts were in moderate or extreme need of more funding for transportations.<sup>52</sup>

#### Literature Review and Best Practices

For many students, the school bus is the only viable means to and from school, making transportation vitally important for educational opportunity. School transportation costs have increased substantially over the last forty years. Since 1980, the average cost per-student has increased by 73%.<sup>53</sup> According to a 2019 publication by Bellwether Education Partners, stagnant state funding for school transportation often requires districts to offset costs by reducing service, delaying upgrades, or other means. School choice has also placed new demands on traditional transportation models built around neighborhood schools.<sup>54</sup>

School districts transport students using the three primary service models. The most common operational model is district-provided where the district controls all elements of school transportation. The second most common is contracting with a private transportation provider for yellow bus service; this model operates largely the same way as district-provided. A much less common model is reliance on existing public transit infrastructure, which is generally only used in large urban districts.

Student transportation funding mechanisms vary widely with some states using actual cost funding, flat rate per unit, or utilization of multivariate calculations and factors. A summary of transportation funding methods is provided in the table below. In 2006, consultants recommended the development of a funding formula based on student density, mileage, or hours of operation, rather than on average daily membership. They also recommended that the General Assembly consider moving the funding for transportation out of the matrix to be funded separately. While the state has added Enhanced Transportation Funding as a separate funding stream, transportation also remains as a line item in the matrix.

<sup>&</sup>lt;sup>52</sup> See Superintendents Survey Responses, question 4.

<sup>&</sup>lt;sup>53</sup> <u>NCES</u> (2020)

<sup>&</sup>lt;sup>54</sup> The Challenges and Opportunities in School Transportation Today

	Actual Costs or Formula	Number of Students	Linear density or Mileage
Definition	States reimburse districts for a portion of actual costs or based on a funding formula	States provide a lump sum to each district based on the number of students it transports	States base transportation funds on the number of bus miles travels or a calculation of "linear density," which represents the average miles traveled per student.
Calculation	Funding formulas typically estimate costs based on average expenditures, historical expenditures, or costs of other inputs like fuel and driver wages.	Per-capita rates may be adjusted for cost factors (commonly fuel prices) or district characteristics (often to account for geographic sparsity that may drive higher transportation costs).	Calculations allow for adjustments for economies-of- scale differences between more urban and more rural districts. Many states adjust reimbursements in other ways to help offset higher costs in geographically large, sparsely populated districts.

#### Matrix: Adjustment

Because the Arkansas Teacher Retirement System increased employee contributions by 1% with a four-year phase-in beginning in the 2020 school year, an adjustment was made below the matrix. For the 2021 school year, the per-pupil amount for the adjustment was \$33 dollars, accounting for .5% of foundation funding that year.

#### Matrix: Additional Funding Needs

To gauge administrators' assessment of how well the current matrix is meeting districts' needs, the BLR surveyed superintendents, asking them to identify which resource components of the matrix are most in need of additional funding. The following table shows the top five matrix items reported by superintendents as in need of more funding.

Matrix Component	% of Superintendents
Special Education Teachers	83%
Classroom Teachers	80%
Transportation	78%
<b>Operations &amp; Maintenance</b>	77%
Substitutes	75%

#### Matrix: Additional Resource Component and Funding Needs

Superintendents were asked if there were any resources not included in the matrix they believe are an important part of providing an adequate education. The top five areas where superintendents reported additional resources were needed in the matrix are provided in the table to the right.

The results from the educator surveys conducted by the BLR for the 2022 adequacy study are consistent with the data collected by APA as part of their district-level survey, educator panels, and online forums. School-based mental health services, school safety, and dyslexia support services were the areas most cited as highly in need of funding.

Resource Component Need Mental Health Services School Safety/SROs Dyslexia Support Services Special Education Support Preschool

#### Mental Health

Multiple data sources suggest that student mental health is an area of increasing need. According to the Centers for Disease Control and Prevention, each year nearly one in five school-age children and youth meet the criteria for a mental health disorder, yet less than 20% of students get the help they need. Of those who do receive mental health services, more than 75% get help in schools. Between 2009-2019, the number of high school students experiencing persistent symptoms of depression increased by 40%, while the number of youth indicating they had made a suicide plan in the past year increased by 44%.<sup>55</sup> In fact, by 2018, suicide replaced homicide as the second leading cause of death in youth ages 10-24. Suicide rates are higher in rural areas for a variety of reasons, but limited access to mental health services is cited as a significant factor.<sup>56</sup> The escalating mental health crisis, exacerbated by the pandemic, prompted the American Academy of Pediatrics, the American Academy of Child and Adolescent Psychiatry, and the Children's Hospital Association to join together in October 2021 to declare a National State of Emergency in Children's Mental Health.<sup>57</sup>

According to the American School Counselor Association, students' unmet mental health needs can be a significant obstacle to student academic, career, and social/emotional development and even compromise school safety.<sup>58</sup> Without planned intervention for students exhibiting early-warning signs, setbacks in academic, career and social/emotional development can result during later school years and even adulthood. High school students with significant symptoms of depression are more than twice as likely to drop out of school, and students aged 6-17 with mental, emotional or behavioral concerns are three times more likely to repeat a grade.<sup>59</sup>

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

Other states' adequacy studies have recommended student mental health support through a combination of guidance counselor, nurse, psychologist, and social workers at a level of 150 students to one mental health professional for elementary and 180:1 for secondary. The matrix currently provides FTE for guidance counselors and nurses at a level of 250:1. Nationally, different models are recommended to support student mental health. The following table shows recommended staffing ratios from school mental health professional associations.<sup>60</sup>

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

<sup>&</sup>lt;sup>55</sup> <u>Center for Disease Control and Prevention</u> (2019)

<sup>&</sup>lt;sup>56</sup> National Association of School Psychologists. (2021). <u>Comprehensive School-Based Mental and Behavioral Health Services and</u> <u>School Psychologists</u>

<sup>&</sup>lt;sup>57</sup> <u>American Academy of Pediatrics</u> (2021)

<sup>&</sup>lt;sup>58</sup> The School Counselor and Student Mental Health (2020), American School Counselor Association.

<sup>&</sup>lt;sup>59</sup> National Alliance on Mental Illness (2021)

<sup>&</sup>lt;sup>60</sup> Arkansas School Finance Study 2020

#### School Safety

The matrix does not provide a dollar amount specific for School Resource Officers. Stakeholders identified this as an expense they are helping cover with other funding, including ESA funds. According to the 2020 APA report, community members in particular shared concerns about school safety, and it is a high priority area for many districts.

During the 2017–2018 school year, U.S. public schools experienced an estimated 962,300 violent incidents and 476,100 non-violent incidents, and around 71% public schools experienced at least one violent incident (National Center of Education Statistics, 2019). The number of school shootings between school years' 2015-2016 and 2019-2020 have almost tripled.<sup>61</sup>

#### Dyslexia

State dyslexia rules require screening of all students in grades K–2, and students in grade 3 and above if teachers note deficiencies in certain skills. If screening indicates need, then the student is provided intervention services. Beginning no later than the 2015-16 academic year, each school district was required to have at least one individual to serve as a dyslexia interventionist. This resource requirement is not addressed currently in the matrix. According to the 2020 APA report, minimal outside information in this area exists as dyslexia is not typically addressed separately from special education resources in adequacy studies. However, stakeholder feedback suggests this area is an unfunded mandate and many districts report having to use matrix or categorical funds to address dyslexia needs.

According to the Yale Center for Dyslexia and Creativity, dyslexia is a language-based learning disorder and is the most common of all neuro-cognitive disorders. Children with dyslexia have an unusually difficult time learning how to read, and they often struggle with reading new words, sounding out words, picking out words they have already learned, spelling, and writing. It is estimated that one in five children has dyslexia, and that 80% to 90% of youth with learning disorders have it. Research shows that early intervention, using evidence-based supports, is critical to helping students with dyslexia not only catch up academically, but to boost their self-confidence, which is often damaged by continuing to struggle in school. <sup>62</sup>

#### Preschool

The matrix has never included preschool students because educating this age group is not constitutionally mandated. However, research is plentiful that preschool, especially for students who may be considered likely to struggle academically because of poverty, language barriers, or other reasons, can be a game-changer by allowing these students to enter school on a similar ready-to-learn level as their more advantaged peers. Odden and Picus in 2003 recommended that preschool be an allowable use for Arkansas's categorical funds for poverty students to help close the achievement gap that continues to exist between these and other students. In 2021, preschool remained an allowable use for these funds, and 124 schools operated preschool classes that year.<sup>63</sup>

According to 2019 report published by the Learning Policy Institute, which includes reviews of rigorous evaluations of 21 public preschool programs, students who attend high-quality preschool programs reap benefits that can last throughout their lives. They are more prepared for school and experience substantial learning gains in comparison to children who do not attend preschool. The report finds that investments in quality preschool programs bolster student success. Students who attend

<sup>&</sup>lt;sup>61</sup> Digest of Education Statistics, National Center for Education Statistics, retrieved December 27, 2021

<sup>62</sup> The Yale Center For Dyslexia and Creativity

<sup>63 2020-2021</sup> LEA Information Grades Served Report created at DESE's MySchoolInfo.arkansas.gov website. (Created Oct. 19, 2021).

preschool programs are less likely to be retained or identified as having special needs than children who did not attend preschool, both resulting in significant cost savings. Studies of preschool programs that have followed students into adulthood show that students who attend preschool are less likely to be unemployed or incarcerated and more likely to graduate high school and earn higher salaries. It is estimated this results in up to \$17 returned for every dollar invested. Even studies that only followed students into elementary school indicate the benefits produce an average of \$2 to \$4 returns on the dollar.<sup>64</sup>

# *Core Tutors, Gifted and Talented Education, Career and Technical Education, and Resources for Struggling Students*

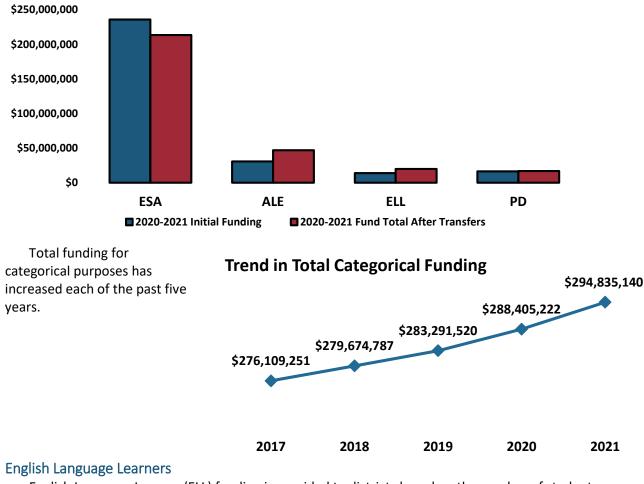
Other resources not currently funded in Arkansas's matrix but identified in Odden and Picus' evidence-based model as critical to the core educational program and for student success include Core Tutors as part of the core instructional program, as well as per student funding resource recommendations for funding Gifted and Talented Education and Career and Technical Education (see Appendix D). The matrix does not provide funding for Gifted and Talented Education, but pursuant to state law, districts are required to expend state and local revenues on Gifted and Talented Programs in an amount equal to fifteen percent (15%) of the Foundation Funding amount multiplied by 5% of the school district's prior year three quarter ADM. The matrix doesn't provide a dollar amount specific for career and technical education (CTE); however, the General Assembly currently includes "curriculum and career and technical frameworks" as part of the definition of Adequacy.

Additionally, their evidence-based model identifies key resources for at-risk students which includes staffing for additional tutors and pupil support staff, extended-day, summer school, and ESL programs based on the number of poverty and ELL students. The specific resource recommendations for struggling students can be found in Appendix D.

#### CATEGORICAL FUNDING

Four streams of categorical funding (for professional development (PD), poverty students, English learners (ELL) and alternative learning environment (ALE students)) have supplemented foundation funding since it was first distributed in 2005, mainly to address equity issues. The funding provided through the categorical streams, however, are considered restricted and may be spent only on the intended uses (defined in statute and/or rule). They may also be transferred to spend on other categorical purposes. For instance, it is common for districts to transfer some of their funding for poverty students to use for English language learners or for students in alternative learning environments.

<sup>&</sup>lt;sup>64</sup> Meloy, B., Gardner, M., & Darling-Hammond, L. (2019). Untangling the evidence on preschool effectiveness: Insights for policymakers. Palo Alto, CA: Learning Policy Institute.



## **Categorical Funding Before and After Transfers**

English Language Learner (ELL) funding is provided to districts based on the number of students identified as not proficient in the English language based upon a state-approved English proficiency assessment instrument, the ELPA21. Districts received \$352 per ELL student in 2021 for the purpose of educating these students.<sup>65</sup> There were 39,155 ELL students in 2021.

2021 / 2022/2023 Per ELL Student Amount	2021 Total Amount	Evidence-Based Model ELL Teacher to Student Ratio*
<b>\$352 /</b> \$359 / \$366	\$13,782,560	1:100

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

#### Literature Review and Best Practices

In their most recent evidence-based model, Odden and Picus recommended one **ELL teacher for every 100 ELL students** as well as other resources that serve all students with special needs. These other resources included one tutor, 0.8 pupil support, 0.83 extended day services, and 0.83 summer school services for every 100 ELL students (and other special needs students).

States fund ELL students in multiple ways – or not at all. The two states that do not are Mississippi and Montana. Among the top performing NAEP states, most use some sort of weighted system. For

Bureau of Legislative Research - Adequacy Study

states using multiple weights, these typically vary by grade level, by level of English proficiency, or ny number of ELL students enrolled.

Top NAEP States	Funding Mechanism
Massachusetts	Multiple Student Weights
New Jersey	Flat Weight
New Hampshire	Flat Weight
Minnesota	Multiple Student Weights
Wyoming	Resource-Based Allocation
Virginia	Resource-Based Allocation
Vermont	Flat Weight
Indiana	Categorical Grant
Connecticut	Flat Weight
Utah	Flat Weight
Source: Education Commission of the States (2021) and EdBuild	

Source: Education Commission of the States (2021) and EdBuild.

Funding Mechanism
Resource-Based Allocation
Flat Weight
Flat Weight
Resource-Based Allocation
Flat Weight
Flat Weight
Resource-Based Allocation
Multiple Student Weights

Source: Education Commission of the States (2021) and EdBuild.

Contiguous States	Funding Mechanism
Missouri	Flat Weight
Tennessee	Resource-Based Allocation
Texas	Multiple Student Weights
Oklahoma	Flat Weight
Arkansas	Flat Weight
Mississippi	None
Louisiana	Flat Weight

Source: Education Commission of the States (2021) and EdBuild.

#### Alternative Learning Environment

Alternative Learning Environment (ALE) funding is restricted state aid to provide alternative environments for students who do not learn well in a traditional classroom environment. Funding for students in alternative learning environments are distributed from the state to school districts based on rules promulgated by the State Board of Education. Funding for ALE is the amount authorized by law multiplied by the district's eligible ALE students' full-time equivalents (FTEs) in the previous school year as defined by the Rules Governing Student Special Needs Funding.<sup>66</sup> School districts and charter systems

<sup>&</sup>lt;sup>66</sup> DESE Rules Governing Student Special Needs Funding

may apply for waivers from offering ALE programs. When they do not offer a program, they do not receive ALE categorical funds.

<b>2021</b> / 2022/2023 Per ALE FTE Amount	2021 Total Amount	Evidence-Based Model*	
<b>\$4,700 /</b> \$4,794 / \$4,890	\$30,866,787 1:15 Teacher-FTE Student Ratio	1.0 FTE Asst. Principal 1:7 Teacher-Student Ratio	

#### Literature Review and Best Practices

Research shows that students who need to be enrolled in an ALE require more academic supports and other services than a traditionally structured school can provide. These students face challenges that necessitate a wide range of intensive academic and social supports to help them succeed. To ensure alternative learning students receive the full range of academic and other support services they need to earn their diplomas, Jobs for the Future (JFF) recommends that states use a formula for alternative education that allocates additional dollars beyond its state and district per-pupil dollar, including adequate funding to provide high-quality leaders and teachers to staff classes and to provide meaningful student support services.<sup>67</sup>

#### **Enhanced Student Achievement**

Funding to help Arkansas schools meet the challenges associated with poverty is called Enhanced Student Achievement funding. It is distributed on a per-student basis for students who qualify for the national free and reduced-price lunch program.<sup>68</sup> Three per-pupil amounts are awarded based on the concentration of poverty students in the school population, as shown in the chart below. Because funding cliffs occur at the 70% and 90% thresholds, transitional and growth ESA funding are distributed based on enrollment changes to smooth funding changes over several years.

<b>2021</b> / 2022/2023 Per ESA Student Amount	2021 Total Amount	Recommendation
<70%: \$526 / \$532 / \$538 70%-90%: \$1,051 / \$1,063 / \$1,076 >90%: \$1,576 / \$1,594 / \$1,613	\$236,505,233	Weight of 20% more than regular student funding

#### Literature Review and Best Practices

Research finds that increased funding can have a positive impact on the academic success of poverty students, especially when it is used to reduce class size (15-18 students) for at-risk students and to ensure teacher quality for those students.<sup>69</sup> Odden and Picus' 2018 research offers that one key to helping struggling students (which refers to all ELL students first and then to all non-ELL poverty students) is to keep standards high for all students but "vary the instructional time so all students have multiple opportunities to achieve proficiency levels."<sup>70</sup>

<sup>70</sup> Odden and Picus, 2018.

<sup>&</sup>lt;sup>67</sup> <u>Reinventing Alternative Education</u> (2010)

<sup>&</sup>lt;sup>68</sup> For those schools and districts that participate in federal lunch programs (Provision 2 and Community Eligibility Program) that do not require annual documentation of qualifying students, the Division of Elementary and Secondary Education provides guidance for estimating the number of children for which funding is provided I the Rules Governing Student Special Needs Funding.

<sup>&</sup>lt;sup>69</sup> Baker, B. (Learning Policy Institute, July 2018.) "How Money Matters for Schools."

The 41 states that provide additional money for poverty students use a number of means for identifying them. The majority, like Arkansas, identify students solely through their eligibility for the National School Lunch (NSL) program (135% of poverty) while others use means of direct certification through federal programs such as the Supplemental Nutritional Assistance Program (SNAP) to identify low-income students. Several more closely follow the Odden and Picus model for struggling students because they combine other indicators such as English language learners or foster care with NSL eligibility. At least one state relies on indicators such as student mobility without regard for NSL participation.

The manner of determining funding amounts also varies greatly among states. For instance, some states provide a flat amount to districts for each low-income student distinct from their base funding amount, while others weight the base funding amount for each low-income student. In some states, these per-student amounts or weights increase according to the concentration of poverty students in a district. Wyoming provides block grants for an additional .15 staff to serve at-risk students.<sup>71</sup>

In their report provided to the Education Committees in December 2020, APA recommended that Arkansas adopt a per-ESA student weighting system to smooth funding cliffs. (Arkansas presently addresses funding cliffs through ESA transition funding, which allows for a graduated change in fund levels over a three-year period.) APA also recommended funding students the same weighted amount regardless of the concentration of poverty within a school. While APA did not recommend specific weights, the per-ESA pupil amounts provided in the 2021 year translate to the following weights:

- \$526 = 1.07
- \$1,051 = 1.15
- \$1,576 = 1.22

#### State Comparisons

The 10 states that are top performers in terms of NAEP and Arkansas's contiguous all provide additional funding for low-income students. Among the top SREB states, Florida and Georgia do not provide these additional funds.

Top NAEP States	Funding Mechanism
Massachusetts	Grant program
New Jersey	Multiplier depending on concentration of poverty
New Hampshire	Flat allocation
Minnesota	Increased funding based on concentration of poverty
Wyoming	Block grant for additional staff
Virginia	Multiplier depending on concentration of poverty
Vermont	Single multiplier
Indiana	Grant programs
Connecticut	Multiplier and supplemental funding for districts with high poverty
Utah	Increased funding for districts based on concentration of poverty

<sup>&</sup>lt;sup>71</sup> Data from Education Commission of the States state comparison funding charts combined with data from EdBuild found at EdBuild | Funded - Examining State Policies for Funding Education across all 50 States.

Top SREB States	Funding Mechanism
Virginia	Multiplier depending on concentration of poverty
Florida	None
Maryland	Single multiplier
North Carolina	Increased funding based on concentration
Kentucky	Single Multiplier
Georgia	None
Tennessee	Flat allocation
Texas	Multiplier based on concentration of poverty
Arkansas &	Funding Mechanism
Arkansas & Contiguous States	Funding Mechanism
	Funding Mechanism Single multiplier for high poverty districts
Contiguous States	
Contiguous States Missouri	Single multiplier for high poverty districts
Contiguous States Missouri Tennessee	Single multiplier for high poverty districts Flat allocation
Contiguous States Missouri Tennessee Texas	Single multiplier for high poverty districts Flat allocation Multiplier based on concentration of poverty
Contiguous States Missouri Tennessee Texas Oklahoma	Single multiplier for high poverty districts Flat allocation Multiplier based on concentration of poverty Multiplier based on concentration of poverty

#### Professional Development (PD)

Professional development categorical funds are split three ways: To districts and charters; to the Arkansas Educational Television Network (AETN); and to Solution Tree. AETN receives PD funds to implement ArkansasIDEAS<sup>72</sup> and Solution Tree receives PD funds to implement the Professional Learning Communities Program. A.C.A. § 6-20-2305 requires that professional development funding to districts and charters equal up to \$40.80 per student. After funding is allotted for AETN and to Solution Tree, the remaining amount is distributed to districts and charters. In 2021, this amount equaled \$36 per student. Special language has appropriated \$3.5 million for AETN (with reporting requirements) since 2017. In 2021, the amount paid to AETN was \$2.7 million, as shown in the table below. This section will focus on the amounts going to districts, charters, and AETN. Funding for Solution Tree will be discussed later in this report as this funding shows up as "Additional PD" on the Education Committees' matrix worksheet.

Waivers may be granted from the statutes and rules governing professional development requirements. The per-pupil funding amount sent to schools remains the same whether these waivers are in effect or not.

2021 / 2022/2023 Per Student Amount	2021 Total Amount	Evidence-Based Model Per-Student Amount**
Total: \$36* / NA / NA	Total: \$19,908,071 Districts: \$17,163,721 AETN: \$2,744,350	\$125

\* A.C.A. § 6-20-2305 requires that professional development funding equal to an amount of up to \$40.80 per student. \*\* Odden, Allan, & Picus, Lawrence O. (2019). *School finance: A policy* perspective, 6<sup>th</sup> ed. New York: McGraw-Hill

<sup>&</sup>lt;sup>72</sup> ArkansasIDEAS is a partnership between DESE and AETN to provide online PD for Arkansas licensed educators and those wishing to obtain an Arkansas educator license.

#### Literature Review and Best Practices

In their most recent evidence-based model<sup>73</sup>, Odden and Picus estimate the cost for effective professional development would be about **\$125 per pupil for trainers.** This includes paying for central office PD staff, outside consultants or school turnaround organizations as well as reimbursements for teacher conference registrations or for tuition for teachers who enroll in appropriate coursework at approved colleges and universities. Costs may also include miscellaneous administrative, materials, supplies, and travel expenses. Odden and Picus also recommend that teachers have 10 days dedicated to PD. Arkansas requires teachers be provided a minimum of six PD days, though many districts exceed that number.

#### SUPPLEMENTAL FUNDING SOURCES

Other funding streams have been in place to help small schools and districts, as well as districts with fluctuating enrollment trends, provide an adequate education since the initial Lake View reforms. In recent years, additional funding streams to have been added to help address specific adequacy-related expenses: transportation; special education; enhanced student achievement (poverty); and teacher salaries.

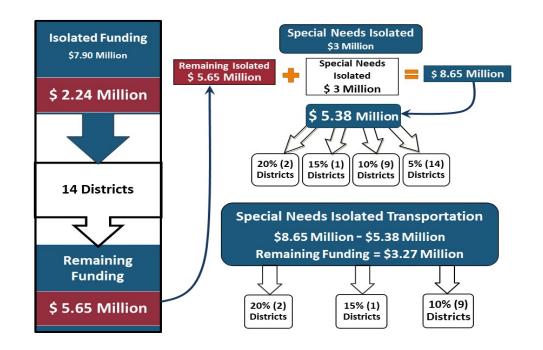
#### **Isolated Schools Funding**

Isolated funding is supplemental funding distributed to districts with low enrollment or geographic challenges, such as rugged road systems and/or low-student density, which can increase costs. There are three types of isolated funding: isolated funding; special needs isolated funding; and special needs isolated – transportation funding. Varying types of restrictions are placed on how these funds can be used. These restrictions will be discussed more in the spending report.

2021 Total Amount \$10,895,977

In 2021, the state distributed almost \$11 million to the 29 districts falling in one or more of the three isolated funding categories. Each category of isolated funding has different eligibility criteria. Funding is first distributed to districts meeting the eligibility criteria for isolated funding. The remaining amount is then available to districts meeting the criteria for the second funding category, special needs isolated funding. The remaining amount is then distributed to districts meeting the distributed to districts meeting requirements for special needs isolated – transportation funding. Each funding type has different spending restrictions that will be discussed in the spending report. The diagram shown below shows how isolated funds are distributed.

<sup>&</sup>lt;sup>73</sup> Odden, Allan, & Picus, Lawrence O. (2019). School finance: A policy perspective, 6th ed. New York: McGraw-Hill



To meet eligibility criteria for isolated funding, a district has to meet four of the following five conditions: long distances; low student density of bus riders; high number of square miles; low proportion of hard-surfaced roads; and geographic obstacles. Once it meets four of these conditions, a district must then meet certain budget requirements, ADM requirements, and the minimum standards for accreditations. These districts receive an amount determined by a formula based on ADM that is set in statute. These can be found in Appendix G. Fourteen districts received isolated funding in the 2021 school year.

Multiple eligibility criteria exist for special needs isolated funding – the second category – that result in districts receiving four different levels of funding. Depending on which of the requirements districts meet, they will receive funding equal to 20%, 15%, 10%, or 5% of the foundation funding rate for each student in the isolated school area(s) or for the district. The 5% category is known as special needs isolated – small district funding which is different because districts receiving this funding typically do not contain isolated schools, but rather are districts with fewer than 500 students. In 2021, 26 districts received special needs isolated funding (excluding special needs isolated – transportation).

The third category of funding is special needs isolated – transportation. This funding, provided to districts with the sole purpose of helping isolated districts with transportation needs, consists of any remaining dollars after isolated and special needs isolated funding is distributed. Twelve districts received this funding in 2021.

Appendix E shows the districts that received each of these forms of isolated funding and the amounts received in 2021. Appendix F shows isolated funding as a percentage of total state funding for each district.

#### Literature Review and State Comparisons

Isolated funding can vary widely by state and is not as common as other types of education funding. Only 36 states use some form of isolated or small school/district funding. Among those states, the mechanism used to provide districts and schools funding varies as well as the factors used to determine funding. These can include location, geographic barriers, sparsity, and/or enrollment size. The following tables show the isolated funding mechanisms used among the top NAEP performing states, the top SREB states, and the contiguous states. States that provide some form of isolated or small school/district funding often have multiple mechanisms in place that can include weights and resource-allocation, or the above factors may be included in transportation funding formulas instead. The various criteria states use to determine eligibility for this funding include travel times, geographic barriers, student density, teacher ratios, class size, or overall student enrollment. Several states provide additional funding for small enrollment districts or schools, either solely or as part of their funding for isolated or rural districts.

Top NAEP States	Funding Mechanism	Funding Criteria				
Massachusetts	Categorical Grant	Student Density				
New Jersey	None	N/A				
New Hampshire	None	N/A				
Minnesota	Multiple Student Weights	Student Count; Distance; Density				
Wyoming	Resource-Based Allocation	Student Count				
Virginia	None	N/A				
Vermont	Hybrid: Categorical Grant and Multiple Student Weights	Average grade size, Travel times or inhospitable travel routes, High student-to- staff ratios, Percentage of students from economically deprived backgrounds, or Participation in a merger study				
Indiana	None	N/A				
Connecticut	None	N/A				
Utah	Categorical Grant	Population				
ources: Education Commission of the States (2021) and EdBuild.						

Top SREB States	Funding Mechanism	Funding Criteria				
Virginia	None	N/A				
Florida	Flat Weight	Student Count; Distance				
Maryland	None	N/A				
North Carolina	Resource Allocation and Flat Amount	Student Count; Density				
Kentucky	None	N/A				
Georgia	Categorical Grant	Student Count				
Tennessee	Transportation Funding	Miles Transported; Density of Pupil Per				
Tennessee	Transportation Funding	Mile Traveled				
Texas	Multiple Weights Student Count					
Sources: Education Commission of the States (2021) and EdBuild.						

**Contiguous States Funding Mechanism Funding Criteria** Missouri **Categorical Grant** Student Count **Transportation Funding** Student Count Tennessee Multiple Weights and Inflated Student Count; Sparsity; Distance Texas Student Count Traveled Oklahoma Flat Weight Student Count; Density Multiple Weights and Student Count; Distance; Density; Arkansas **Transportation Funding Geographic Barriers** Mississippi None N/A Louisiana **Multiple Weights** Student Count

Sources: Education Commission of the States (2021) and EdBuild.

In their evidence-based model<sup>74</sup>, Odden and Picus recommend adjustments for school districts that have smaller enrollment numbers. Odden and Picus state that school districts below 975 students require additional support staff for an adequate program. For a district with 975 students or fewer, they recommend staffing one assistant principal and one full-time teacher for every seven students. This would provide staffing that the very small district can deploy in any way it wishes. In 2021, 134 Arkansas school districts had fewer than 975 students, or 51.9% of all school districts. Odden and Picus use the example of a 390 student K-12 school in Appendix B.

In a 2020 study of New Hampshire's funding system for public schools, the American Institutes for Research and the New Hampshire Commission to Study School Funding both recommended that small enrollment districts needed more funding. The American Institutes for Research found that "districts with higher student needs and small districts require more spending per student to achieve a common desired level of student outcomes." The Commission recommended multiple weights for small districts, varying by enrollment size. The Commission noted that smaller districts "operate at a lower level of cost efficiency than larger districts".<sup>75</sup>

#### **Student Growth Funding**

Student growth funding is additional funding the state provides to growing districts to help support their additional students. No restrictions are placed on how these funds can be spent.

The student growth funding formula and a sample calculation can be found in Appendix H. The student growth funding formula is based on quarterly ADM (rather than yearly ADM) and provides the full foundation amount for each student that a district gains.

2021 Total Amount \$29,536,568

Because of the difference in the student growth and declining enrollment calculations, it is possible for a district to qualify for student growth funding and declining enrollment funding in one school year. However, since 2007, state law has prohibited districts from receiving both types of funding.<sup>76</sup> Under DESE rules, when a district qualifies for both, the DESE issues the funding type that would result in the most money for the district.<sup>77</sup> Declining enrollment is discussed in the next section.

	Historical Student Growth Funding <sup>78</sup>							
Year	Districts that Total Student		Charters that	Charters that Total Student				
	Received	Growth	Received	Growth	Growth			
	Student Growth	Funding:	Student Growth	Funding:	Funding			
	Funding	Districts	Funding	Charters				
2017	101	\$28,562,548	8	\$5,420,593	\$33,983,141			
2018	117	\$25,702,411	6	\$2,920,878	\$28,623,289			
2019	110	\$20,644,366	7	\$3,422,676	\$24,067,042			
2020	101	\$21,524,794	7	\$4,795,253	\$26,320,047			
2021	103	\$11,656,740	11	\$17,879,828	\$29,536,568			

<sup>&</sup>lt;sup>74</sup> Odden, Allan, & Picus, Lawrence O. (2019). *School finance: A policy perspective*, 6<sup>th</sup> ed. New York: McGraw-Hill

<sup>&</sup>lt;sup>75</sup> The Commission to Study School Funding. (December 2020). "Our Schools, Our Kids: Achieving Greater Equity for New Hampshire Students and Taxpayers."

https://carsey.unh.edu/sites/default/files/media/2020/12/final\_report\_forcommission\_v5\_12012020.pdf

<sup>&</sup>lt;sup>76</sup> Act 461 of 2007; Act 272 of 2007; Arkansas Code Annotated § 6-20-2305(a)(3)(C).

<sup>&</sup>lt;sup>77</sup> Arkansas Department of Education Rules Governing Declining Enrollment and Student Growth Funding for Public School Districts, effective January 1, 2019, 4.04.

<sup>&</sup>lt;sup>78</sup> State Aid Notices 2018-19 through 2020-21. The data above represent the three-quarter ADM for the years indicated.

In 2021, payments to districts ranged from \$2,298 (Mammoth Spring School District) to \$1,829,224 (Bentonville School District), with an average payment of \$49,603.

Payments to open-enrollment public charter schools in 2021 ranged from \$1,421 to \$8,432,583. Two charters received a total of \$15,375,157 of the student growth payments to charters, or about 86% of the student growth funding paid to charters. The two charters are Arkansas Connections Academy (\$6,942,574) and Arkansas Virtual Academy (\$8,432,583).

Student growth payments increased more than \$3 million from 2020 to 2021 despite a statewide decrease in enrollment. District enrollment dropped almost 10,000 from 2020 to 2021, while charter enrollment grew almost 4,000.

Statewide Enrollment <sup>79</sup>						
Year	District Enrollment	Charter Enrollment	<b>Combined Enrollment</b>			
2017	460,010	13,440	473,450			
2018	460,035	15,089	475,124			
2019	457,151	17,414	474,565			
2020	456,200	19,134	475,334			
2021	446,707	22,844	469,551			

#### Literature Review and State Comparisons

Seventeen states have some form of growth funding to provide districts with growing enrollment. Many states have no form of student growth funding. This is particularly true in states that use currentyear enrollment counts for funding; Arkansas uses prior-year ADM to determine foundation funding.<sup>80</sup>

States use different approaches to growth funding. In some states, the state provides highgrowth districts additional funding based on the percentage of growth in the current year. In some states, the state averages the amount of a district's growth over a period of years and adds the average percent of growth to the district's enrollment count. In other states, the state adjusts more than once in a school year, with the district receiving all or half of the foundation funding amount for each student gained.<sup>81</sup>

Odden and Picus' evidence-based model recommends funding districts based on the full-time average daily membership, using the actual count for schools with stable or rising district counts.<sup>82</sup>

In their 2020 Arkansas study, APA recommended funding districts that had at least a 2% growth rate. The change would decrease the number of districts receiving student growth funding, as well as the amount of overall funding.<sup>83</sup>

<sup>&</sup>lt;sup>79</sup> State Aid Notices 2017-2018 through 2020-21.

<sup>&</sup>lt;sup>80</sup>Augenblick, Palaich and Associates (Presentation to Senate Committee on Education and House Committee on Education, June 8, 2020.) "Growth Funding and Declining Enrollment."

<sup>&</sup>lt;sup>81</sup> Ibid.

<sup>&</sup>lt;sup>82</sup> Odden, Allan, & Picus, Lawrence O. (2019). School finance: A policy perspective, 6<sup>th</sup> ed. New York: McGraw-Hill

<sup>&</sup>lt;sup>83</sup> "Growth Funding and Declining Enrollment" by Augenblick, Palaich and Associates, Presentation to Senate Committee on Education and House Committee on Education, June 8, 2020.

#### **Declining Enrollment Funding**

Declining enrollment is funding provided to districts that have lost students and therefore experience a loss in foundation funding. No restrictions are placed on how these funds can be spent.

#### 2021 Total Amount

\$14,681,796

The formula for calculating declining enrollment and a sample calculation can be found in Appendix I. Declining enrollment funding is based on yearly ADM (rather than quarterly ADM) and provides a district about half the foundation funding amount for each student lost.

As discussed above, because of the difference in the declining enrollment and student growth calculations, a district may be eligible for declining enrollment and student growth funding in the same year, but districts may not receive both types of funding.<sup>84</sup> DESE awards the funding type that would result in the most money for the district.<sup>85</sup>

In 2021, payments to districts ranged from \$983 (West Side School District—Cleburne County) to \$892,023 (Pine Bluff School District), with an average payment of \$60,873.

Since the beginning of declining enrollment funding, state statute has prohibited districts from receiving both declining enrollment and special needs isolated funding.<sup>86</sup> Act 909 of the 2021 Regular Session changed the statute to allow a district to receive both special needs isolated funding and declining enrollment funding.<sup>87</sup> Any funding appropriated for either declining enrollment or special needs isolated that is not distributed under the formulas is prorated and distributed equally per average student loss to school districts that meet the qualifications for both declining enrollment and special needs isolated funding.<sup>88</sup>

Historical Declining Enrollment Funding <sup>89</sup>							
Year	Districts that Received Declining Enrollment Funding	t Total Charters that Declining Received Enrollment Declining		Total Declining Enrollment Funding: Charters	Total Declining Enrollment Funding		
2017	83	\$11,267,662	1	\$58,850	\$11,326,512		
2018	93	\$12,743,391	8	\$500,185	\$13,243,576		
2019	96	\$11,714,039	7	\$953,918	\$12,667,957		
2020	109	\$18,483,453	6	\$949,820	\$19,433,273		
2021	110	\$14,305,210	3	\$326,337	\$14,631,547		

#### Literature Review and Best Practices

Proponents of declining enrollment provisions argue that the provisions serve two goals: 1) allowing time for communities and economics in rural areas to rebound, improve, and adjust to changes in population and revenue; and 2) ensuring that students in rural areas are offered an adequate

<sup>&</sup>lt;sup>84</sup> Arkansas Code § 6-20-2305(a)(3)(C)

<sup>&</sup>lt;sup>85</sup> Arkansas Department of Education Rules Governing Declining Enrollment and Student Growth Funding for Public School Districts, effective January 1, 2019, 4.04.

<sup>86</sup> Arkansas Code § 6-20-2305(a)(3)(A)

<sup>87</sup> Act 909 of 2021.

<sup>&</sup>lt;sup>88</sup> Arkansas Code Annotated § 6-20-2305(a)(3)(B); Act 21 of the 1<sup>st</sup> Extraordinary Session of 2006.

<sup>&</sup>lt;sup>89</sup> State Aid Notices, 2019-2020 through 2020-21.

education.<sup>90</sup> Opponents of declining enrollment funding argue that declining enrollment funding allows districts to avoid restructuring for smaller enrollments, discourages experimentation, and diverts funding from other uses.<sup>91</sup>

Declining enrollment policies can take several forms: 1) protections against declining enrollment; 2) hold-harmless provisions; 3) small district subsidies; and 4) minimum categorical allocations.<sup>92</sup>

Hold-harmless provisions guarantee districts a certain level of funding. In Connecticut, the 33 lowest-performing districts in the state, known as Alliance Districts, are permanently held harmless at the fiscal year 2017 funding amount, even if the districts experience a decline in population that would otherwise mean a decline in funding.<sup>93</sup>

Hold-harmless provisions may also be specific to districts losing students to charter schools. Connecticut funds districts based on the enrollments of students living in their region whether the student attends a district school or a charter school. In Massachusetts, when a student leaves a district for a charter school, the district no longer receives the revenue associated with that student; the revenue goes to the charter school. Massachusetts then provides a partial tuition reimbursement to the district for up to six years after the student begins attending the charter.<sup>94</sup>

Declining enrollment protections are additional funds provided to districts that are experiencing a decline in enrollment.<sup>95</sup> The formulas vary by state. For example, in Colorado, a district with declining enrollment receives funding based on the average of up to three prior years' October student counts and the current year's October student count. In Nevada, schools with declining enrollment may base funding on either of the two prior years' average daily membership, whichever is greater. Districts with a declining enrollment of less than 5% get additional funding for one year, but districts with a decline of 5% or more receive two years of additional funding.<sup>96</sup>

Another form of declining enrollment funding is small district subsidies. In some states, the subsidies are a weight in the state allocation form based on district size. In other states, the state funds certain items by district; for example, a particular kind of staff person might have a funding level of one per district. In these states, the cost-per-pupil of the one-per-district item is much higher in smaller schools because of the lower number of students.<sup>97</sup>

Some states that use categorical funds require minimum allotments for certain categorical funding allocations. In this situation, the state sets a minimum allotment for a categorical. A district with a very small number of the targeted population will receive at least the minimum allotment.<sup>98</sup>

<sup>&</sup>lt;sup>90</sup> Jimerson, L. (Rural School and Community Trust Policy Brief, February, 2006.) "Breaking the Fall: Cushioning the Impact of Rural Declining Enrollment."

<sup>&</sup>lt;sup>91</sup> Fullerton, J. and Roza Marguerite. (Education Next, May 1, 2013.) "Funding Phantom Students."

<sup>&</sup>lt;sup>92</sup> Ibid.

 <sup>&</sup>lt;sup>93</sup> Atherton, M. and Rubado, M. (Center on Regional Politics, December 2014.) "Hold Harmless Education Finance Policies in the U.S.: A Survey." School + State Finance Project. "Education Cost Sharing (ECS) Formula." <u>https://ctschoolfinance.org/issues/ecs-formula</u>.
 <sup>94</sup> Ibid.

<sup>&</sup>lt;sup>95</sup> Fullerton, J. and Roza Marguerite. (Education Next, May 1, 2013.) "Funding Phantom Students."

<sup>&</sup>lt;sup>96</sup> Atherton, M. and Rubado, M. (Center on Regional Politics, December 2014.) "Hold Harmless Education Finance Policies in the U.S.: A Survey."

<sup>&</sup>lt;sup>97</sup> Jimerson, L. (Rural School and Community Trust Policy Brief, February, 2006.) "Breaking the Fall: Cushioning the Impact of Rural Declining Enrollment."

<sup>&</sup>lt;sup>98</sup> Fullerton, J. and Roza Marguerite. (Education Next, May 1, 2013.) "Funding Phantom Students."

Odden and Picus' evidence-based model recommends funding students based on the school and district where they are actually attending school, and using a rolling three-year average pupil count when students are declining to help districts deal with enrollment decline and the corresponding loss in revenues.<sup>99</sup> Odden and Picus recognize that this method of funding may have the effect of creating "phantom students," or students who are counted in their new district but still partially funded in their old district until the three-year average cycles through.<sup>100</sup>

In its 2020 Arkansas study, APA offered two alternative approaches to funding declining enrollment: using a three-year average and using a percentage per year. The three-year average would provide districts with the highest ADM of the current year, average of the current year and prior year, or average of the last three years. A percentage per year model would assign percentages to the prior year, two years back, and three years back ADM, with each year further back receiving smaller percentages of funding. Both methods would increase the overall amount of declining enrollment funding.<sup>101</sup>

#### **Enhanced Student Achievement Grants**

In 2018, the General Assembly began providing an additional source of funds to supplement spending to improve achievement levels of low-income students. School districts and charter schools are reimbursed for the previous years' expenditures on three evidence-

**2021** / 2022/2023 Total Amount

#### **\$5.3 million /** \$5.3 million / \$5.3 million

based uses: tutors; before- and after-school programs; and prekindergarten programs. Funding was distributed in November 2020 to 192 school districts and charter school systems on a prorated basis of 25.3%.<sup>102</sup> Distribution amounts ranged from \$61.50 (West Memphis School District) to \$976,688 (Little Rock School District). This money is restricted to the same uses as ESA funding.

#### Special Education High-Cost Occurrences

Special Education High-Cost Occurrences funding is provided to districts when an individual student's special education and related services required in his/her individualized learning plan (IEP) are

unduly expensive, extraordinary, or beyond the routine and normal costs associated with special education and related services.<sup>103</sup> Districts must submit eligible claims<sup>104</sup> to be reimbursed by DESE. The district is responsible

#### 2021 / 2022/2023 Total Amount

\$13.02 million / \$13.5 million / \$14.99 million

for 100% of the first \$15,000 after being adjusted for offsets. Offsets include Title VI-B (Federal IDEA Part B funding), Medicaid reimbursements, and other funds received (extended school year, third party liability, etc.). After that, districts can be reimbursed 100% of expenses between \$15,000 and \$65,000 and 80% of expenses of \$65,000 to \$100,000. Reimbursements are prorated if total reimbursement requests exceed the amount of funds available in the High-Cost Occurrences fund. In 2021, nearly 84% of all eligible claims were reimbursed to districts. This is up from previous years due to a change in rules

 <sup>&</sup>lt;sup>99</sup> Odden, A. Picus, L. (2019). School finance: A policy perspective, 6<sup>th</sup> ed. New York: McGraw-Hill.
 <sup>100</sup> Ibid.

<sup>&</sup>lt;sup>101</sup> Augenblick, Palaich and Associates (Presentation to Senate Committee on Education and House Committee on Education, June 8, 2020.) "Growth Funding and Declining Enrollment."

<sup>&</sup>lt;sup>102</sup> Email from Tracy Webb, Coordinator of Fiscal Services and Support, Division of Elementary and Secondary Education, dated Oct. 19, 2021.

<sup>103</sup> A.C.A. § 6-20-2303

<sup>&</sup>lt;sup>104</sup> Eligible claims include those for students currently enrolled in the district at the time of submission, when costs exceed \$15,000, and the costs must have incurred solely as a result of the provision of special education and related services to the individual student.

that began in 2020 in how eligible claims were calculated. In 2019, 39% of approved claims were reimbursed to districts. At that time, the first \$15,000 was eligible for 100% reimbursement, followed by 80% of the next \$35,000, and 50% of the next \$50,000. The new method is intended for DESE to "fund those truly extraordinary costs that could put an extreme financial hardship on a school with little or no need for proration."<sup>105</sup> While the percentage of eligible (under the new formula) claims reimbursed to districts increased from 38% to 84%, the amount of unfunded total claims increased from \$24 million to \$25.7 million. Additionally, the amount of available high-cost occurrence funds remained the same, \$13.02 million. Other than the restrictions on the types of claims that are eligible to be reimbursed, there are no restrictions on how those reimbursed funds are to be spent.

The following table shows high-cost occurrences funding changes over the past five years, with the rule change going into effect in FY20.

	Number of Students	Number of Districts/ Charters	Funding Per Student	Total Eligible Amount (millions)	Max Amount of Reimburse- ment (millions)	Total Funding Provided (millions)	Percent of Approved Funds Received	Total Eligible Amount Not Funded (millions)
2017	1,303	164	\$8 <i>,</i> 442	\$32.5	\$29.9	\$11	36.8%	\$21.5
2018	1,357	168	\$9 <i>,</i> 579	\$34.2	\$31.3	\$13	41.5%	\$21.2
2019	1,442	164	\$9 <i>,</i> 029	\$37.0	\$33.9	\$13.02	38.5%	\$24.0
				Rule	Change			
2020	1,398	160	\$9 <i>,</i> 313	\$37.3	\$16.1	\$13.02	81.0%	\$24.3
2021	1,276	155	\$10,204	\$38.8	\$15.6	\$13.02	83.7%	\$25.7

#### **Enhanced Transportation**

Enhanced Transportation money is distributed to school districts found to be underfunded for transportation using matrix dollars only. This

#### 2021 / 2022/2023 Total Amount

**\$5 million /** \$6 million / \$7.2 million

determination is made through a multistep formula, which

first uses a regression formula to estimate a district's or public charter school system's transportation expenses. Three variables – average daily attendance, route miles and the number of bus riders – combine to be very accurate predictors of transportation expenses, often with predictive value of higher than 90% at a statistically significant level. These predicted amounts are compared with districts' and charter systems' actual funding and actual expenditures to determine the amount of additional funding provided. Funding is distributed based on need until it is depleted. In 2021, funding amounts ranged from \$73 (Rector) to \$148,828 (Caddo Hills). Spending of Enhanced Transportation funding is not restricted by statute to transportation costs.

#### Additional Professional Development

As noted earlier, a portion of PD categorical funds is distributed to Solution Tree for the implementation of the Professional Learning Communities (PLC) pilot program. The PLC Pilot

#### **2021** / 2022/2023 Total Amount

**\$12.5 million /** \$14.5 million / \$16.5 million

program is a partnership between DESE and Solution Tree, a private organization that provides PD resources, training, and support to K-12 educators, to implement the PLC at work model in selected

<sup>&</sup>lt;sup>105</sup> ADE-DESE Proposed Changes to Catastrophic Occurrence Fund Rule September 9, 2019.

districts and schools. More details about how this program works will be provided in a later report. In the 2021 school year, \$12.5 million was provided for 50 schools and districts participating in the program.

#### **Educator Compensation Reform Programs**

The Educator Compensation Reform Program was established by Act 877 of 2019 in order to assist districts to continue to meet the minimum salary requirements of the Teacher Salary Enhancement Act (Ark. Code Ann. § 6-17-2403 as amended by Act 170 of 2019). Educator

2021 / 2022/2023 Total Amount

**\$15 million/** \$15 million / \$15 million

Compensation Reform funds are restricted, and funding for this program ends in 2023.

#### **Teacher Salary Equalization**

To assist in addressing the disparities in teacher salaries within the state and compared to surrounding states, the legislature passed Acts 679 and 680 of 2021, creating the Teacher Salary Equalization Fund to provide public school districts and open-enrollment charter schools with additional

restricted funding dedicated to increasing teacher salaries. Equalization funding is provided to districts and charter schools that have an average annual teacher salary below the statewide target average annual salary set by the legislature and who are not scheduled to receive funds from the Educator Compensation Reform Fund (Act 877 of 2019). The target average annual salary is a statewide measure, not an expectation for each district or charter school. Equalization funding is continuous and will increase if a district's ADM increases. The legislature may also increase the state target average and the amount of per-student funding as part of the adequacy review process, which will increase the amount of funds districts will be eligible to receive. Funding will not decrease below the amount a district receives in the initial base year even if ADM decreases.

Each year, districts and charter schools should use equalization funds to meet or exceed the state minimum salary requirements in Ark. Code Ann. § 6-17-2403. Districts and charter schools may also use equalization funds to increase or add to local minimum salary schedules and for salaries and benefits paid out of the teacher salary fund. One-time salary payments are not the preferred use of equalization funds to meet the intended purpose and goals of the legislature but are allowable. Districts must use all equalization funding for teacher salaries and benefits each year and not carry over funds.

The teacher salary equalization fund is created by shifting \$15 million within legislative committee recommendations for public school funding and \$10 million from the educational adequacy trust fund. The legislation allows districts with below-average teacher salaries to raise them using a pool of money equal to the district's average daily enrollment multiplied by \$185.

#### **OTHER STATE FUNDING**

In addition to the funding described above, in the 2020 school year, the most recent for which data is available, the school districts and charter school systems in Arkansas received an additional \$258 million in state funding. While \$110,363 of that was considered "unrestricted," the remainder was restricted to specific uses such as gifted and talented education, career education, and early childhood education.

#### 2021 / 2022/2023 Total Amount

**\$0 /** \$25 million / \$25 million

#### FEDERAL FUNDING

In the 2020 school year, the most recent for which data is available, Arkansas school districts and charter school systems received \$594 million in federal funds, all of which is restricted to its intended use. These uses include special education and spending for poverty students, for example.

#### 2021 Legislation

Below is a listing of the legislation passed by the General Assembly during the 2021 session pertaining to funding:

ACT 633 (SB61) provides that a school district may use **enhanced student achievement funds** to support the school district's participation in the College and Career Coaches Program. The act provides that, to participate in the program, a school district shall apply jointly with an institution of higher education, an education service cooperative, or a nonprofit organization to the Division of Career and Technical Education. The act provides that implementation of the program shall be monitored by on-site technical assistance visits at least one (1) time every two (2) years. The act also adds additional criteria for evaluating the effectiveness of the program.

*ACT 544* (SB64) repeals the law concerning consultants hired to determine whether and in what respect certain Pulaski County school districts are unitary and have complied with their respective consent decrees concerning desegregation. The act also repeals the law concerning **desegregation funding**.

*ACT 909* (SB629) allows a public school district that has experienced a decline in average daily membership over the two (2) immediately preceding school years to receive both **declining enrollment funding and special needs isolated funding**.

*ACT 323* (SB207) and ACT 400 (HB1433) increases the **enhanced transportation funding** amounts for eligible school districts for the 2021-2022 and 2022-2023 school years.

*ACT 614* (HB1677) amends the amount of **foundation funding, categorical funding, and Enhanced Student Achievement funding** for public schools for the 2021-2022 and 2022-2023 school years. The act declares an emergency and is effective on and after April 8, 2021.

*ACT 544* (SB64) provides for the calculation of **student growth funding** based on the per- student foundation funding for a school district, the school district's quarterly average daily membership for the fourth quarter of the previous school year, and the average daily membership in the year before the fourth quarter.

*ACT 679* (SB504) and ACT 680 (HB1614) provide that, beginning with the 2021-2022 school year, school districts identified by the Division of Elementary and Secondary Education as having an average annual teacher salary below the statewide target shall receive **teacher salary equalization funding** equal to one hundred eighty-five dollars (\$185) multiplied by the average daily membership of the school district for the previous school year.

Prototypical 3,900-Student School District						
Elementary SchoolsMiddle SchoolsHigh SchoolsK-56-89-12						
Class size	K-3: 15 4-5: 25	25	25			
Prototypical School Size	450	450	600			
# of Schools	4	2	2			
<b># of Grades in school</b> 6 3 4						
# of Students Per Grade	75	150	150			
# of Students	1,800	900	1,200			

# Appendix A - EB Model Prototypical District and School Size

	Prototypical 450-Student Elementary School					
Grade	# of Students Per Grade	# of Classes	# of Students Per Class	# of Teachers		
К	75	5	15	5		
1	75	5	15	5		
2	75	5	15	5		
3	75	5	15	5		
4	75	3	25	3		
5	75	3	25	3		
	26					
	5.2					
		Total Teac	ner Resource Requirement	31.2		

	Prototypical 450-Student Middle School						
Grade	# of Students Per Grade	# of Classes	# of Students Per Class	# of Teachers			
6	150	6	25	6			
7	150	6	25	6			
8	150	6	25	6			
	Total Core Teachers						
	3.6						
		Total Teacl	her Resource Requirement	21.6			

	Prototypical 600-Student High School					
Grade	# of Students Per Grade	# of Classes	# of Students Per Class	# of Teachers		
9	150	6	25	6		
10	150	6	25	6		
11	150	6	25	6		
12	150	6	25	6		
	Total Core Teachers					
	8					
		Total Teac	ner Resource Requirement	32		

# Appendix B - EB Model Small School Districts

Recommendations for Small School Districts					
School Element	K-12 School with 390 Students*	K-12 School with 390 Students	K-12 School with 195 Students	K-12 School with 97.5 Students	
Staff					
Core and elective teachers	23.2	24	13	13.93	
Instructional coaches	1.95	2	1		
Core tutors	0.8	1	0.5		
Counselor/nurse	1.76	2.0	1.0		
Supervisory aides	1.8	2	1		
Librarian	0.8	1	0.5		
Principal	0.8	1	1		
Assistant principal	0.2	1	0	1	
School site secretary	1.8	2	1		
Dollars Per Pupil Resources for C	ore Programs	:			
Gifted and Talented Education	\$40/student	\$40/pupil	\$40/pupil		
Professional development	\$125/pupil	\$125/pupil	\$125/pupil		
Instructional materials	\$200/pupil	\$200/pupil	\$200/pupil		
Short cycle/interim assessments	\$25/pupil	\$25/pupil	\$25/pupil		
Technology	\$250/pupil	\$250/pupil	\$250/pupil		
Extra duty funds/student activities	\$300/pupil	\$300/pupil	\$300/pupil		

\*Using regular Evidence-Based Model formula

	Central Of	fice EB Model Assumpt	tions		
250-student 500-student		1,000-student	2,000-student	≥ 4,000-student	
District	District	District	District	District	
Little to no support	Little to no support	Little to no support	Little or no support	The size of the	
services are provided	services are provided	services are provided	is provided by a	district now	Ś
by a county office of	by a county office of	by a county office of	county office of	enables it to	2
education or other	education or other	education or other	education;	become a self-	9
intermediate	intermediate	intermediate		sufficient district.	Ţ
education agency;	education agency;	education agency;			Ő
					ġ
	- · · ·				2
Support services such	Support services such	Support services such	With the increase in		
as special education	as special education	as some special	enrollment, the		(
including OT and PT,	including OT and PT,	education including OT	district now has the		
legal services, facilities	legal services,	and PT, legal services,	opportunity to		ġ
support, grounds	facilities support,	facilities support,	provide district level		ŝ
maintenance,	grounds	grounds maintenance,	resources and		Ċ
transportation, food	maintenance,	transportation, food services, and so on	support in-house. This includes the		-
services, etc., would be contracted out;	transportation, food services, etc., would	would be contracted	sharing of		
De contracteu out,	be contracted out.	out. However, the	responsibilities		
	However, the	continued increase in	across divisions to		
	increase in student	student enrollment	provide the support		ŝ
	enrollment would	would necessitate the	schools and		2
	necessitate the need	need for additional	employees need.		ichaach araa h
	for special	support services being	The individual school		
	educational services	provided in-house	sites become		2
	being provided in-	both administratively	increasingly		~
	house;	and with clerical	autonomous and the		
Instructional services,	,	support.	superintendent		
human resources,	Instructional services,		provides both the		
curriculum and	human resources,		big picture and		
assessment, special	curriculum and		hands-on leadership		
education, and	assessment, special		throughout the		ι
professional	education, and		district.		
development would be	professional				
the responsibility of	development would				
the superintendent.	be the primary				
	responsibility of the				
	superintendent.				

# Appendix C - EB Model Central Office Assumptions

# Appendix D - EB Model Resource Recommendations

Model Element	Evidence-Based Model Recommendation
Staffing Resources for	Core Programs:
1. Preschool	<ul> <li>Full day preschool for children aged 3 and 4.</li> <li>1.0 teacher for each 15-student class.</li> <li>1.0 instructional for each 15-student class.</li> </ul>
2. Full-day kindergarten	Full-day kindergarten program. Each K student counts as 1.0 pupil in the funding system.
3. Elementary core teachers/class size	<ul> <li>1:15 grades K-3 (average class size of 17.3)</li> <li>1:25 grades 4-5/6</li> </ul>
4. Secondary core teachers/class size	1:25 grades 6-12 (average class size of 25)
5. Elective/specialist teachers	<ul> <li>20% of core elementary teachers</li> <li>20% of core middle school teachers</li> <li>33 1/3% of core high school teachers</li> </ul>
6. Instructional facilitators/coaches	1.0 instructional coach position for every 200 students
7. Core tutors/Tier 2 intervention	<ul> <li>1:450 elementary and middle schools</li> <li>1:600 high schools</li> <li>Additional tutors are enabled through poverty and ELL pupil counts in Elements 22 and 26</li> </ul>
8. Substitute teachers	5% of core and elective teachers, instructional coaches, tutors, and additional teacher positions under resources for at-risk students.
9a. Guidance counselors	<ul> <li>1:450 grade K-5 students</li> <li>1:250 grade 6-12 students</li> <li>Additional student support resources are provided on the basis of poverty and ELL students in Element 23</li> </ul>
9b. Nurses	1:750 grade K-12 students
10. Supervisory aides	<ul><li> 2:450 elementary and middle schools</li><li> 3:600 high schools</li></ul>
11. Library media specialist	<ul> <li>1.0 library media specialist for each 450-student elementary and middle school</li> <li>1.0 library media specialist for each 600-student high school</li> </ul>
12. Principals and assistant principals	<ul> <li>1.0 principal for the 450-student elementary and middle schools</li> <li>1.0 principal and 1.0 assistant principal for the 600-student high school</li> </ul>
13. School site secretarial and clerical staff	<ul> <li>2.0 secretary positions for the 450-student elementary and middle schools</li> <li>3.0 secretary positions for the 600-student high school</li> </ul>

Model Element	Evidence-Based Model Recommendation
<b>Dollars Per Pupil Reso</b>	urces for Core Programs:
14. Gifted and	\$40 per pupil
<b>Talented Education</b>	
15. Intensive	• 10 days of student-free time for training built into teacher contract year, by
professional	adding 5 days to the average teacher salary
development	• \$125 per pupil for trainers (In addition, PD resources include instructional
	coaches [Element 5] and time for collaborative work [Element 4.)
16. Instructional	• \$200 per pupil for instructional and library materials
materials	• \$50 per pupil for extra help program of poverty, ELL, summer school, and
	extended-day
17. Short cycle/	\$25 per pupil for short cycle, interim and formative assessments
interim assessments	
18. Technology and	\$250 per pupil for school computer and technology equipment
equipment	
19. Career and	\$10,000 per CTE teacher for specialized equipment
<b>Technical Education</b>	
20. Extra duty	• \$300 per student for co-curricular activities including sports and clubs for
funds/student	grade K-12
activities	\$50 per student for preschool
<b>Resources for At-Risk</b>	Students (Extra Help)
21. Tutors	• 1.0 tutor position for every 100 ELL students
	<ul> <li>1.0 tutor position for every 100 non-ELL poverty students</li> </ul>
22. Additional pupil	<ul> <li>1.0 pupil support position for every 125 ELL students</li> </ul>
support staff	<ul> <li>1.0 pupil support position for every 125 tell students</li> <li>1.0 pupil support position for every 125 non-ELL poverty students</li> </ul>
23. Extended-day	<ul> <li>1.0 teacher position for every 120 ELL students</li> </ul>
23. Extended-day	<ul> <li>1.0 teacher position for every 120 non-ELL poverty students</li> </ul>
24. Summer school	<ul> <li>1.0 teacher position for every 120 ELL students</li> <li>1.0 teacher position for every 120 ELL students</li> </ul>
24. Juillier School	<ul> <li>1.0 teacher position for every 120 ELL students</li> <li>1.0 teacher position for every 120 non-ELL poverty students</li> </ul>
25. ESL staff for	As described above:
English-language	
learners (ELL)	<ul> <li>1.0 tutor position for every 100 ELL students</li> <li>1.0 numil support position for every 125 ELL students</li> </ul>
learners (ELL)	<ul> <li>1.0 pupil support position for every 125 ELL students</li> <li>1.0 support day position for every 120 ELL students</li> </ul>
	<ul> <li>1.0 extended-day position for every 120 ELL students</li> <li>1.0 every state show a solition for every 120 ELL students</li> </ul>
	1.0 summer teacher position for every 120 ELL students
	In addition, 1.0 ESL teacher position for every 100 ELL students
26. Alternative	• 1 assistant principal position for every 7 ALE students in an ALE program
schools	• 1 teacher position for every 7 ALE students in an ALE program
	1 teacher position for every 7 Welcome Center eligible ELL students
27. Special education	
	• 7.1 teacher positions per 1,000 students for services for students with mild
	and moderate disabilities and the related services for speech/hearing
	pathologies and/or OT PT
	• This allocation equals approximately 1 position for every 141 students
	Plus
	<ul> <li>psychologist per 1,000 students to oversee IEP development and ongoing</li> </ul>
	review

_	Model Element	Evidence-Based Model Recommendation
		<ul> <li>In addition</li> <li>Full state funding for students with severe disabilities, and state-placed students, minus the cost of the basic education program and Federal Title VIb, with a cap on the number covered at 2% of all students</li> </ul>
	Staff Compensation	Resources
	28. Staff	For salaries, average of previous year
	compensation	For Benefits:
		<ul> <li>Retirement or pension costs: A state set % per employee</li> </ul>
		• Health Insurance: \$12,000-15,000 per employee
		Social Security and Medicare: 7.65%
		Workers' Compensation: 0.6%
		• Unemployment Insurance: 0% as the state fully reimburses costs

	SNI Amount						
District Name	Isolated Funding Amount	Amount	% Foundation Funds Received Category	SNI- Transportation	Total Isolated Funding		
JASPER	\$433,533	\$877,183	15%	\$272,451	\$1,583,167		
DEER/MT. JUDEA	\$307,323	\$572 <i>,</i> 009	20%	\$272,451	\$1,151,783		
HILLCREST	\$196,356	\$591,828	20%	\$272,451	\$1,060,635		
OZARK MOUNTAIN	\$278,065	\$247,995	10%	\$272,451	\$798,511		
MOUNTAIN VIEW	\$222,778	\$272,902	10%	\$272,451	\$768,131		
EMERSON- TAYLOR-BRADLEY	-	\$325,719	10%	\$272,451	\$598,170		
COSSATOT RIVER	\$227,402	\$74,159	10%	\$272,451	\$574,012		
SEARCY COUNTY	\$111,878	\$125,026	10%	\$272,451	\$509,355		
<b>OUACHITA RIVER</b>	\$100,408	\$105,017	10%	\$272,451	\$477,876		
HUNTSVILLE	\$27,737	\$158,256	10%	\$272,451	\$458,444		
HARMONY GROVE	\$55,664	\$80,216	10%	\$272,451	\$408,331		
DEWITT	\$62,030	\$43,533	10%	\$272,451	\$378,014		
BEARDEN	-	\$171,232	5%	-	\$171,232		
JACKSON COUNTY	\$91,069	-	-	-	\$91,069		
BRINKLEY	-	\$162,151	5%	-	\$162,151		
MOUNT IDA	-	\$154 <i>,</i> 336	5%	-	\$154,336		
MAGNOLIA	\$48,673		-	-	\$48,673		
CLARENDON	-	\$147,266	5%	-	\$147,266		
HERMITAGE	-	\$146 <i>,</i> 304	5%	-	\$146,304		
MINERAL SPRINGS	-	\$144,255	5%	-	\$144,255		
NEVADA	-	\$137,248	5%	-	\$137,248		
MULBERRY/ PLEASANT VIEW BI-COUNTY	\$79,986	-	-	-	\$79,986		
KIRBY	-	\$135,690	5%	-	\$135,690		
CALICO ROCK	-	\$128,836	5%	-	\$128,836		
VIOLA	-	\$125,506	5%	-	\$125,506		
DERMOTT	-	\$118,488	5%	-	\$118,488		
MARVELL-ELAINE	-	\$118,229	5%	-	\$118,229		
AUGUSTA	-	\$117,657	5%	-	\$117,657		
STRONG-HUTTIG	-	\$102,642	5%	-	\$102,642		
Total Amount	\$2,242,902	\$5,383,683	-	\$3,269,412	\$10,895,997		

### Appendix E – 2021 Isolated Funding Amounts

# Appendix F – Isolated Funding as Percentage of Total State Funding (2020)<sup>106</sup>

District Name	Total Isolated Funding	Total State Funding	Isolated Funding as % of Total State Funding
DEER/MT. JUDEA	\$1,093,772	\$4,666,447	23.4%
HILLCREST	\$1,051,488	\$5,103,364	20.6%
JASPER	\$1,583,881	\$9,617,572	16.5%
OZARK MOUNTAIN	\$790,880	\$6,901,185	11.5%
OUACHITA RIVER	\$510,347	\$6,902,297	7.4%
SEARCY COUNTY	\$544,244	\$8,874,184	6.1%
COSSATOT RIVER	\$632,768	\$10,415,538	6.1%
MOUNTAIN VIEW	\$810,451	\$14,169,556	5.7%
EMERSON-TAYLOR-BRADLEY	\$590,955	\$10,478,234	5.6%
HARMONY GROVE	\$449,649	\$8,969,458	5.0%
NEVADA	\$135,486	\$3,691,327	3.7%
MOUNT IDA	\$155,021	\$4,361,554	3.6%
BEARDEN	\$165,742	\$4,869,138	3.4%
DEWITT	\$412,895	\$12,278,052	3.4%
VIOLA	\$129,163	\$3,891,495	3.3%
KIRBY	\$123,909	\$3,755,653	3.3%
CALICO ROCK	\$128,197	\$3,949,816	3.2%
HERMITAGE	\$146,659	\$4,526,399	3.2%
MARVELL-ELAINE	\$122,868	\$4,050,325	3.0%
DERMOTT	\$117,952	\$4,008,842	2.9%
AUGUSTA	\$124,568	\$4,356,313	2.9%
STRONG-HUTTIG	\$97,983	\$3,481,202	2.8%
CLARENDON	\$152,337	\$5,666,035	2.7%
HUNTSVILLE	\$470,890	\$19,894,963	2.4%
MULBERRY/PLEASANT VIEW BI- COUNTY	\$88,406	\$4,351,620	2.0%
MINERAL SPRINGS	\$140,460	\$7,429,844	1.9%
JACKSON COUNTY	\$87,047	\$8,261,396	1.1%
CLEVELAND COUNTY	\$28,880	\$7,628,794	0.4%
MAGNOLIA	\$9,091	\$25,146,825	0.0%

Source: 2019-20 Annual Statistical Report (ASR). The total local and state funds is the sum of Lines 24 and 39 in the ASR.

<sup>&</sup>lt;sup>106</sup> Total State Funding for 2021 was not available in time for inclusion of this report.

### Appendix G – Isolated Areas Funding Amount

This list provides the isolated school areas as defined by Act 65 of the 2<sup>nd</sup> Extraordinary Session, 2003, and the per-student funding amount each area receives as isolated funding.

County	Isolated School Area	Current School District	Per-Student Funding
Van Buren	Alread	Clinton	\$2,219
Desha	Arkansas City	McGehee	\$2,040
Randolph	Biggers-Reyno	Corning	\$763
Miller	Bright Star	Fouke	\$916
Marion	Bruno-Pyatt	Ozark Mountain	\$329
Dallas	Carthage	Malvern	\$1,938
Independence	Cord-Charlotte	Cedar Ridge	\$235
Woodruff	Cotton Plant	Augusta	\$733
Crittenden	Crawfordsville	Marion	\$642
Newton	Deer	Deer/Mt. Judea	\$853
Greene	Delaplaine	Greene County Tech	\$215
Desha	Delta Special	McGehee	\$952
Nevada	Emmet	Blevins	\$307
Sharp	Evening Shade	Cave City	\$115
Ashley	Fountain Hill	Hamburg	\$339
Yell	Fourche Valley	Two Rivers	\$1,603
Arkansas	Gillett	DeWitt	\$1,000
Lincoln	Gould	Dumas	\$765
Lincoln	Grady	Star City	\$560
Polk	Hatfield	Mena	\$42
Monroe	Holly Grove	Clarendon	\$868
Arkansas	Humphrey	DeWitt	\$328
Union	Huttig	Strong-Huttig	\$668
Cleveland	Kingsland	Cleveland County	\$394
Madison	Kingston	Jasper	\$661
Phillips	Lake View	Barton-Lexa	\$1,054
Searcy	Leslie	Searcy County	\$628
Lawrence	Lynn	Hillcrest	\$782
Columbia	McNeil	Stephens	\$329
Union	Mount Holly	Smackover	\$898
Newton	Mount Judea	Deer/Mt. Judea	\$622
Izard	Mount Pleasant	Melbourne	\$225
Johnson	Oark	Jasper	\$1,576
Montgomery	Oden	Ouachita River	\$671
Saline	Paron	Bryant	\$733
Yell	Plainview-Rover	Two Rivers	\$297
Franklin	Pleasant View	Mulberry/Pleasant View Bi-Co	\$679
Randolph	Randolph Co.	Twin Rivers	\$444
Lawrence	River Valley	Hillcrest	\$106
Stone	Rural Special	Mountain View	\$788

County	Isolated School Area	Current School District	Per-Student Funding
Searcy	Saint Joe	Ozark Mountain	\$727
Madison	Saint Paul	Huntsville	\$123
Hempstead	Saratoga	Mineral Springs	\$1,407
Van Buren	Scotland	Clinton	\$1,841
Dallas	Sparkman	Harmony Grove	\$487
Ouachita	Stephens	Stephens	\$1
Stone	Stone County	Mountain View	\$367
Jackson	Swifton	Jackson County	\$458
Columbia	Taylor	Emerson-Taylor	\$353
Howard	Umpire	Cossatot River	\$2,152
Union	Union	El Dorado	\$45
Columbia	Walker	Magnolia	\$819
Newton	Western Grove	Ozark Mountain	\$375
Cleburne	Wilburn	Concord	\$978
Sharp	Williford	Twin Rivers	\$475
Washington	Winslow	Greenland	\$494

### **Appendix H - Student Growth Funding**

Student growth funding is calculated by comparing the average daily membership (ADM) for each quarter in the current year to the prior year's three-quarter ADM excluding the current fourth-quarter ADM. The fourth-quarter ADM is calculated by using the fourth-quarter ADM from the prior year and the three-quarter ADM from two years earlier. If there is an increase, DESE multiplies the amount of growth from each quarter by .25, and this equals the quarterly growth rate. The quarterly growth rate for each quarter is summed to get the total growth rate. Finally, the growth rate is multiplied by the foundation funding rate, and this equals the amount of total growth funding.

Student added.           Student Growth Example Calculation           Quarterly         Three- Quarter ADM         Growth         *         Quarterly Growth Rate           4 <sup>th</sup> Quarter—FY20         524.57         506.87—FY19         17.7         .25         4.425           1 <sup>st</sup> Quarter—FY21         527.35         516.29—FY20         11.06         .25         2.765           2 <sup>nd</sup> Quarter—FY21         532.09         516.29—FY20         15.8         .25         3.95										
		Student Growth Example Calculation								
		•		Growth	*	•				
		ADIVI	Quarter ADM			Growth Rate				
	4 <sup>th</sup> Quarter—FY20	524.57	506.87—FY19	17.7	.25	4.425				
	1 <sup>st</sup> Quarter—FY21	527.35	516.29—FY20	11.06	.25	2.765				
	2 <sup>nd</sup> Quarter—FY21	532.09	516.29—FY20	15.8	.25	3.95				
	3 <sup>rd</sup> Quarter—FY21	532.38	516.29—FY20	16.09	.25	4.0225				

Ultimately, the formula provides districts and charters the full rate of foundation funding for annrovimately each student added

In the example, the total growth rate (15.1625) multiplied by the foundation funding rate (\$7,018) would equal \$106,410 in total student growth funding.

**Total Growth Rate** 

15.1625

### Appendix I - Declining Enrollment Funding

Declining enrollment is calculated by subtracting a district's average daily membership (ADM) for the previous year from the average ADM for the previous two years. This amount is multiplied by the per-student foundation funding amount, resulting in providing foundation funding rate for about half of the students the district lost in a given year.

It is important to note that, because foundation funding is based on prior-year ADM, districts with declining student populations receive foundation funding for more students than the districts are actually educating. The table below illustrates how a district receiving declining enrollment actually receives money for one and a half times the number of students the district lost (through foundation funding and declining enrollment funding).

	Declining Enrollment Example Calculation							
Year	Current Year Students	Foundation-Paid Students (Based on Previous Year's Students)	Difference Between Funded Students and Students District is Actually Educating	Students Funded by Declining Enrollment	Total Funded Students Above Current Year Students			
2017	1,020							
2018	1,000	1,020	+20					
2019	980	1,000	+20	+10	+30			
2020	960	980	+20	+10	+30			
2021	940	960	+20	+10	+30			

In the example, the district lost 20 students from 2020 to 2021. In 2021, the district is receiving the equivalent of foundation funding for 30 students that the district is not actually responsible for educating.

# APPENDIX J - Top NAEP States' Funding Methods

Top NAEP States	K-12 Public School Funding	Special Education	English Language Learners	Funding for Low- Income Students	Isolated/ Small District or School Funding
Massachusetts	Foundation Formula	Census-Based and High-Cost	Multiple Weights	Grant program	None
New Jersey	Foundation Formula	Census-Based and High-Cost	Single Weight	Multiplier depending on concentration of poverty	None
New Hampshire	Foundation Formula	Single Student Weight and High-Cost	Per-Student Amount	Flat Allocation	None
Minnesota	Foundation Formula	Multiple Student Weights and Reimbursement	Per-Student Amount and Funding Formula	Increased funding based on concentration of poverty	Multiple Weights
Wyoming	Foundation Formula	Reimbursement	Block Grant	Block grant for additional staff	Resource- Allocation
Virginia	Hybrid: Foundation Formula & Resource Allocation	Resource- Allocation	Resource Allocation	Multiplier depending on concentration of poverty	None
Vermont	Other	Resource- Allocation	Single Weight	Single multiplier	Multiple Weights
Indiana	Foundation Formula	Multiple Student Weights	Grant	Grant programs	None
Connecticut	Foundation Formula	High-Cost	Single Weight and Grant	Multiplier and supplemental funding for districts with high poverty	None
Utah	Foundation Formula	Block Grant	Single Weight	Increased funding based on concentration of poverty	Multiple Weights

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# APPENDIX K - Top SREB States' Funding Methods

Top SREB States Funding		Special Education	English Language Learners	Funding for Low- Income Students	Isolated/ Small District or School
Virginia	Hybrid: Foundation Formula & Resource Allocation	Resource Allocation	Resource- Allocation	Multiplier depending on concentration of poverty	None
Florida	Foundation Formula	Multiple Student Weights and High-Cost	Single Weight	None	Flat Weight and Grant
Maryland	Foundation Formula	Single Student Weight	Single Weight	Single multiplier	None
North Carolina	Resource Allocation	Single Student Weight	Resource- Allocation	Increased funding based on concentration of poverty	Resource Allocation and Flat Amount
Kentucky	Foundation Formula	Multiple Student Weights	Single Weight	Single multiplier	None
Fou Fou Re	Hybrid: Foundation Formula & Resource Allocation	Multiple Student Weights	Single Weight	None	Grant
Tennessee	Resource Allocation	Resource Allocation	Resource- Allocation	Flat Allocation	Transportation Funding
Texas	Foundation Formula	Multiple Student Weights	Multiple Weights	Multiplier depending on concentration of poverty	Multiple Weights and Inflated Student Count

# APPENDIX L - Contiguous States' Funding Methods

Contiguous States	K-12 Public School Funding	Special Education	English Language Learners	Funding for Low- Income Students	Isolated/ Small District or School Funding
Missouri	Foundation Formula	Single Student Weight	Single Weight	Single multiplier for high poverty districts	Grant
Tennessee	Foundation Formula	Resource- Allocation	Resource- Allocation	Flat Allocation	Transportation Funding
Texas	Foundation Formula	Multiple Student Weights	Multiple Weights	Multiplier depending on concentration of poverty	Multiple Weights and Inflated Student Count
Oklahoma	Foundation Formula	Multiple Student Weights	Single Weight	Multiplier depending on concentration of poverty	Multiple Weights and Transportation Funding
<u>Arkansas</u>	<u>Foundation</u> <u>Formula</u>	Foundation Funding and High-Cost	<u>Per-Student</u> <u>Amount</u>	Increased funding based on concentration of poverty	<u>Multiple</u> <u>Weights and</u> <u>Transportation</u> <u>Funding</u>
Mississippi	Foundation Formula	Resource- Allocation	None	Single multiplier	None
Louisiana	Foundation Formula	Single Student Weight	Single Weight	Single multiplier	Multiple Weights

# APPENDIX M - 2021 Matrix Foundation Funding Information

Matrix Lines	2021 Foundation Per-Pupil Amount	2021 Foundation Funding Amount	% of Total Foundation Funding
Kindergarten Teachers	\$274	\$130,474,241	4%
Teachers Grades 1-12	\$3,142	\$1,496,539,544	45%
Special Education Teachers	\$397	\$189,187,649	5%
Instructional Facilitators	\$342	\$163,092,801	5%
Librarian or Media Support	\$116	\$55,451,552	2%
Guidance Counselor	\$152	\$72,413,204	2%
Nurse	\$92	\$43,708,871	1%
Other Student Support	\$99	\$46,970,727	1%
Principal	\$198	\$94,373,255	3%
Secretary	\$82	\$38,921,226	1%
Technology	\$250	\$119,098,000	3%
Instructional Materials	\$188	\$89,514,057	3%
Extra Duty	\$66	\$31,537,150	1%
Supervisory Aides	\$50	\$23,819,600	1%
Substitute Teachers	\$72	\$34,204,946	1%
<b>Operations and Maintenance</b>	\$706	\$336,189,834	10%
Central Office	\$439	\$209,040,810	6%
Transportation	\$321	\$153,017,110	4%
Total	\$7,018	\$3,458,028,818	100%