

Teachers, FTE Per 500 Students				
	Kindergarten	Grades 1-3	Grades 4-12	Non-Core
<b>FY21 Matrix</b>	2.00 FTE, based upon 20:1	5.00 FTE, based upon 23:1	13.80 FTE, based upon 25:1	4.14 FTE, based upon 20% of classroom teacher FTE
<b>Historic Variation (if any)</b>	No change	No change	No change	No change
<b>Changes for Next Biennium</b>	No change	No change	No change	No change
<b>Prior Arkansas Studies</b>	15:1 (2003); 20:1 (2006); 15:1 (2014)	15:1 (2003); 20:1 (2006); 15:1 (2014)	Same as matrix level	Same as matrix level in 2003 and 2006; 20% of K-8 classroom teachers and 33 1/3% of 9-12 classroom teachers (2014)
<b>Other State Adequacy Studies</b>	15:1 (mode)	15:1 for 1st-2nd grade, 25:1 in 3rd grade (mode)	25:1 (mode)	Tended to recommend a higher percentage in secondary schools; most frequently recommended 16% for elementary, 20% for middle and 33% for high school
<b>District Data</b>	No statistically significant relationship between class sizes and performance	No statistically significant relationship between class sizes and performance	No statistically significant relationship between class sizes and performance	No additional analysis
<b>Educator Panels/Stakeholder Survey</b>	Funded class size and accreditation maximum too close; should allow for more cushioning/rounding to allow for variation in number of students. Class sizes, particularly in lower grades should be smaller. Limited specific survey feedback recommended a range of 10-18:1, with 15:1 suggested most often	Class sizes, particularly in lower grades, should be smaller. Limited specific matrix feedback suggested a range of 15-20:1	Limited specific matrix feedback suggested lower class sizes in grades 4-5 as class size maximums tend to be higher than the funding ratios	Some feedback that the ratio was fine at elementary grades but not at secondary grades to provide the range of courses needed. Limited specific matrix feedback was inconsistent
<b>Case Studies</b>	Generally smaller class sizes due to most being smaller schools. Using interventionists/aides and scheduling for intervention/enrichment time to allow for smaller group instruction in/out of classroom	Generally smaller class sizes due to most being smaller schools. Using interventionists/aides and scheduling for intervention/enrichment time to allow for smaller group instruction in/out of the classroom	Generally smaller class sizes due to most being smaller schools. Using interventionists/aides and scheduling for intervention/enrichment time to allow for smaller group instruction in/out of the classroom	No consistent theme across case study schools, but schools had common planning and collaboration time which non-core percentage allows for
<b>Literature Review/Policy Scan</b>	Research indicates small class sizes in lower grades (15:1 K-3) improve student outcomes; range was 13:1 to 17:1, so class sizes above 17:1 unlikely to show the same education impact	Research indicates small class sizes in lower grades (15:1 K-3) improve student outcomes; class sizes above 17:1 unlikely to show the same education impact	Limited research above 3rd grade regarding the impact of class size on outcomes	Not reviewed
<b>Arkansas Rules or Accreditation Requirements</b>	Kindergarten shall be no more than 20:1 in a classroom. However, kindergarten class maximum may be no more than 22 with a one-half time instructional aide.	The average student/teacher ratio for grades 1-3 shall be no more than 23:1 in a classroom. There shall be no more than 25:1 in any classroom.	<b>For grades 4-6:</b> the average student/teacher ratio shall be no more than 25:1 and a maximum of no more than 28:1 in any classroom. <b>For grades 7-12:</b> a teacher shall not be assigned more than 150 students; and an individual academic class shall not exceed 30 students, provided that, in exceptional cases or for courses that lend themselves to large group instruction.	4.14 FTE, based upon 20% of classroom teacher FTE

### Pupil Support Staff, FTE Per 500 Students

	Special Education Teachers	Instructional Facilitators	Library/ Media Specialist	Counselor/Nurse
<b>FY21 Matrix</b>	2.90 FTE	2.50 FTE, based upon 200:1	0.85 FTE	2.50 FTE
<b>Historic Variation (if any)</b>	No change	No change	Has increased from 0.7 in 2004-05 to 0.825 in 2007-08, then to 0.85 in 2015-16	No change
<b>Changes for Next Biennium</b>	No change	No change	No change	No change
<b>Prior Arkansas Studies</b>	Same as matrix in 2003 and 2006; 1.0 FTE teacher and 1.0 FTE aide per 150 regular education students for a total of 6.6 FTE (2014)	Same as matrix	Elementary: 0.0 FTE, Middle: 1.0 FTE, High: 1.5 FTE (2003); 1.0 FTE all levels (2006); 1.0 FTE per 450 students K-8, 1.0 FTE per 600 students 9-12 for a total FTE of 1.03 (2014)	Minimum of 1.0 + 1.0 FTE per every 100 students in poverty. Elem: 2.5 FTE, Middle: 3.5 FTE, High: 4.5 FTE (2003); 2.5 FTE all levels + additional 1.0 FTE for higher poverty levels (2006); specifies 1.0 nurse per 750 K-12 school for 0.7 FTE, total of 2.3 FTE (2014)
<b>Other State Adequacy Studies</b>	Figures varied widely, tended to include teacher, instructional aide and pupil support staff (such as therapists) with levels set by actual student counts	200:1 (mode)	450:1 for elementary, and 525:1 for secondary (mode)	150:1 for elementary, 180:1 for secondary (mode), combined guidance counselor, nurse, psychologist, and social worker levels
<b>District Data</b>	ESA funds are being used to cover special education costs	Districts on average have 1.78 FTE per 500 students (BLR 2020)	Districts on average have 0.97 FTE per 500 students (BLR 2020)	Districts on average have 1.37 FTE counselors and 0.97 FTE nurse per 500 students (BLR 2020)
<b>Educator Panels/Stakeholder Survey</b>	Educators on panels said this is a key area they have to use other funds to cover costs (both special education in the matrix and high cost students). Limited stakeholder feedback suggested funding should be based upon identified students as population vary; total of 3-8 FTE suggested	Not addressed during educator panels, and limited specific matrix feedback was less about the level of these positions and more how they were used	Should be funded at 1.0, as accreditation standards would require a full-time position at 500 students; specific matrix feedback was consistent of at least 1.0 FTE	Nurse should be 1.0 FTE; additional support for student mental health should be provided as most counselors are not trained in this area
<b>Case Studies</b>	Not addressed	No consistent theme across case study schools, some case studies use outside consultants or cooperative staff instead	Case study schools had a full-time librarian/media specialist	Case study schools emphasize counseling and advisement, but current counselor staffing is only sufficient for guidance/scheduling and not addressing mental health
<b>Literature Review/Policy Scan</b>	Most states (36) fund special education based upon actual student counts, though 5 states cap funded counts at a certain rate. 4 states, including Arkansas, provide special education resources as part of its base funding. The other states provide a single weight/dollar amount (10), multiple weights/dollar amounts by disability or need (14), a resource allocation model (7), through reimbursement (6), or a hybrid approach (remaining states).	Not reviewed	Not reviewed	2017-18 NCES data: the average counselor staffing ratio in Arkansas is 385:1, which is lower than the average of 407:1 for SREB states + Massachusetts; still higher than American School Counselor Association (ASCA) recommended 250:1

Principal and Secretary, FTE Per 500 Students			All Staff Salaries and Benefits	
	Principal	Secretary	Teacher and Pupil Support Staff Salaries and Benefits	Principal and Secretary Salaries and Benefits
<b>FY21 Matrix</b>	1.00 FTE	1.00 FTE	\$68,470	<b>Principals:</b> \$99,012 <b>Secretaries:</b> \$40,855
<b>Historic Variation (if any)</b>	No change	Originally in carry forward, became 1.0 FTE in 2007-08 (removed from carry forward)	Original FY05 matrix was based upon a 26% increase and have increased by 2.2%, on average, annually since FY05	Principals: Similarly have increased by 2.2%, on average, annually since FY05; however, this includes a 12.9% increase in FY08, but no increases for six years (FY16-FY21) Secretaries: Starting in FY08, increased 1.3%, on average, annually; but no increases for four of those years (including FY20 and FY21)
<b>Changes for Next Biennium</b>	No change	No change	\$70,010.60 (FY22), \$71,585.80 (FY23)	<b>Principals:</b> \$101,487.00 (FY22), \$104,024.20 (FY23) <b>Secretaries:</b> \$41,876.40 (FY22), \$42,923.30 (FY23)
<b>Prior Arkansas Studies</b>	Same as matrix	In carry forward (2003); 2.0 FTE, removed from carry forward (2006); 1.0 per 225 K-8 students, and 1.0 per 200 9-12 students for a total of 2.31 FTE (2014)	Not reviewed	Not reviewed
<b>Other State Adequacy Studies</b>	Same as matrix	Varied by school size, but for schools of around 500 students or higher, there were at least 2.0 FTE recommended	Not reviewed	Not reviewed
<b>District Data</b>	No additional analysis	Districts on average have 2.58 FTE per 500 students (BLR 2020)	Funded base salary in matrix is higher than statewide average salary (BLR 2020). Average teacher salary disparities exist by size, need and locale within the state- salaries lower in smaller districts, higher need districts and rural districts	No additional analysis
<b>Educator Panels/Stakeholder Survey</b>	No feedback (feedback of the need for assistant principals will be discussed separately)	Should be at least 2.0 FTE in a school of 500, as most schools have at least two main office staff members	Teacher salaries not competitive (compared to other districts, certain neighboring states), create issues with staff attraction and retention; salary disparities across the state. Limited specific matrix feedback said teacher salaries should be increased and noted that most teachers are not being paid at the funded level	Feedback primarily about the lack of increases in recent years
<b>Case Studies</b>	All case study schools had a full-time principal; having strong leadership was noted as a contributing factor to success	Schools over 400 had at least 2.0 FTE	Not addressed	Not addressed
<b>Literature Review/Policy Scan</b>	Not addressed	Not reviewed	Average salary in 2018-19 of \$51,019 (NCES data), when compared to bordering states it is higher than Missouri, Mississippi and Oklahoma, but lower than Texas (\$54,155) and Tennessee (\$56,567). National average is \$61,189	2017-18 NCES data: the average counselor staffing ratio in Arkansas is 385:1, which is lower than the average of 407:1 for SREB states + Massachusetts; still higher than American School Counselor Association (ASCA) recommended 250:1

### School-level Resources

	Technology	Instructional Materials	Extra Duty Funds	Supervisory Aides	Substitutes
<b>FY21 Matrix</b>	\$250 per student	\$187.90 per student	\$66.20 per student	\$50 per student	\$71.80 per student
<b>Historic Variation (if any)</b>	Was \$250 per student in FY05 matrix, was reduced in FY07 to \$185 per student and increased in most years until it was reset at \$250 per student in FY17	\$250 per student in FY05 matrix, reduced to \$160 per student in FY08, has increased since then	\$90 per student in FY05 matrix, \$50 in FY08 matrix, has gradually increased since then	\$35 per student in FY05 matrix, gradually increased before reaching a maximum of \$56.70 per student in FY15, reduced to \$50 per student in FY16	\$66 per student in FY05 matrix, reduced to \$57 in FY06, then gradually increased to \$71.80 in FY19, then no change in FY20 and FY21
<b>Changes for Next Biennium</b>	No change	\$192.60 per student (FY22), \$197.40 per student (FY23)	\$67.90 per student (FY22), \$69.60 per student (FY23)	\$51.30 per student (FY22), \$52.60 per student (FY23)	\$73.60 per student (FY22), \$75.40 per student (FY23)
<b>Prior Arkansas Studies</b>	Same as current matrix level	\$250 per student (2003, 2006 and 2014)	Elementary: none, Middle: \$60, High: \$125 (2003); \$100 all levels (2006); \$200 for K-8 and \$250 for 9-12 (2014)	\$35 per student (2003); \$98.70 per student to allow for 2.0 FTE (2006)	\$63 per student (2003) and \$67.94 (2006)
<b>Other State Adequacy Studies</b>	\$250 per student (mode)	\$250 per student (mode); \$20 per student for assessment (mode); \$20 per student for elementary and \$250 per student for secondary for student activities (mode)	Not addressed	Not addressed	Not addressed
<b>District Data</b>	Districts spend \$278 per student on average (BLR 2020)	Districts spend \$227 per student on average (BLR 2020)	Districts spend \$233 per student on average (BLR 2020)	Districts spend \$18 per student on average (BLR 2020)	Districts spend \$105 per student on average (BLR 2020)
<b>Educator Panels/Stakeholder Survey</b>	Underfunded; districts are using other funds to supplement. Limited specific matrix feedback said that the amount was not sufficient to address needed devices for 1-to-1. Technology expenditures are particularly high this year due to remote instruction	Not a primary concern in educator panels. Limited specific matrix feedback said that this amount did not cover the costs of textbooks or online materials, range of suggestions was \$250-300 per student	Need to be revisited in light of minimum wage increases	Need to be revisited in light of minimum wage increases	Need to be revisited in light of minimum wage increases
<b>Case Studies</b>	Technology/broadband access was a noted issue, particularly this year	Not addressed	Not addressed	No common theme other than protecting teacher time	Not addressed
<b>Literature Review/Policy Scan</b>	Not reviewed	Not reviewed	Not reviewed		Not reviewed

<b>District-level Resources and Professional Development (Categorical Outside of Matrix)</b>				
	<b>Maintenance and Operations (M&amp;O)</b>	<b>Central Office</b>	<b>Transportation</b>	<b>Professional Development</b>
<b>FY21 Matrix</b>	\$705.70 per student	\$438.80 per student	\$321.20 per student	\$40.80 per student
<b>Historic Variation (if any)</b>	In FY05, carried forward current expenditures for M&O, central office and transportation In FY08, M&O- set at \$581 per student with gradual increases since then	In FY05, carried forward current expenditures for M&O, central office and transportation In FY08, Central Office set at \$376 with gradual increases in most years, but no changes in past 5 years	In FY05, carried forward current expenditures for M&O, central office and transportation In FY08, Transportation set at \$286, with gradual increases through FY14 then no increases	\$50 per student in 2004-05, minimal change until it was reduced to \$32.40 per student in FY15. No change between FY15-FY20, increased to \$40.80 per student in FY21
<b>Changes for Next Biennium</b>	\$723.30 (FY22), \$741.30 (FY23)	\$447.60 (FY22), \$456.50 (FY23)	No change	No change
<b>Prior Arkansas Studies</b>	In 2003, \$1,152 per pupil for all district level resources (roughly the same as carry forward); in 2006 recommended \$591 per student	In 2003, \$1,152 per pupil for all district level resources (roughly the same as carry forward); in 2006 recommended \$594 per student	In 2003, \$1,152 per pupil for all district level resources (roughly the same as carry forward); in 2006 recommended \$286 per student	\$50 per student (2003), also \$50 per student in 2006 but recommended that the full amount go to districts; same in 2014
<b>Other State Adequacy Studies</b>	Not addressed	Not addressed	Not addressed	\$100 per student outside of days for teachers (mode)
<b>District Data</b>	Districts on average spend \$1,059 per student from all funds (BLR 2020)	Districts on average spend \$528 per student from all funds (BLR 2020)	Districts on average spend \$418 per student from all funds (BLR 2020)	In 2020, districts were expending \$38.68 per student, on average, for PD after excluding federal funds
<b>Educator Panels/Stakeholder Survey</b>	Limited stakeholder feedback said that M&O costs should be reviewed in light of increasing maintenance and equipment costs	No consistent feedback	Some feedback that transportation costs vary widely between districts	Feedback focused on successful professional development strategies vs costs
<b>Case Studies</b>	Not addressed	Not addressed	Not addressed	Case study themes were about successful professional development strategies vs. costs
<b>Literature Review/Policy Scan</b>	Not reviewed	Not reviewed	Not reviewed	Research is primarily regarding characteristics of effective professional development

## Resources Not Currently Addressed in Matrix

	Student Mental Health	School Resource Officer/ Security	Assistant Principal	Dyslexia Resources
<b>FY21 Matrix</b>	Not currently in matrix	Not currently in matrix	Not currently separately addressed in matrix	Not currently in matrix
<b>Historic Variation (if any)</b>	Not currently in matrix	Not currently in matrix	Not currently separately addressed in matrix	Not currently in matrix
<b>Changes for Next Biennium</b>	No change	No change	No change	No changes
<b>Prior Arkansas Studies</b>	No recommendations	No recommendations	Not included in 2003 and 2006 outside of the Instructional Facilitator FTE (accreditation requirements treats as interchangeable), added a 1.0 FTE Assistant Principal per 600 9-12 students for a total of 0.26 FTE (2014)	No recommendations
<b>Other State Adequacy Studies</b>	150:1 for elementary, 180:1 for secondary (mode), combined guidance counselor, nurse, psychologist, and social worker levels	Not reviewed	Varied by school size, but for all school types (elementary, middle and high school) of around 500 students, 1.0 FTE recommended most often	Not typically addressed separate from special education resources
<b>District Data</b>	Districts using ESA funds to provide; also reviewed current district strategies for mental health in survey	Districts are currently using matrix or categorical funds to provide SROs	Districts on average have 0.84 FTE per 500 students (BLR 2020)	No additional analysis
<b>Educator Panels/Stakeholder Survey</b>	Need additional FTE additional for a combination of social worker, psychologist and behavioral specialist	Many districts report having to use categorical or matrix funds to address, suggestion that there should be a 1.0 FTE in each school	Need to have an assistant principal (at least 0.5 FTE at 500) to meet all necessary administrative and instructional leadership duties	Need support as this is currently an unfunded mandate
<b>Case Studies</b>	Mental health support is critical. Case study schools are using outside community therapists, billed through Medicaid, but does not meet the need of all students	Not addressed	Case study schools over 400 had a full time AP, below that level some schools had a part-time AP	Many districts report having to use categorical or matrix funds to address
<b>Literature Review/Policy Scan</b>	National Association of School Psychologists (NASP) recommends 250:1 for school counselors, 500-700:1 for school psychologists, and 400:1 for school social workers; National Association of Social Workers (NASW) 250:1 for school social workers, unless working w/ intensive needs students	Not reviewed	Not reviewed	Not reviewed
<b>Arkansas Rules or Accreditation Requirements</b>			Schools with an enrollment exceeding 500 students shall employ at least one full-time principal and a half-time assistant principal, instructional supervisor, or curriculum specialist	State dyslexia rules require screening of all students in grades K-2, and students in grade 3 and above if teachers note deficiency in certain skills. If screening indicates need, then the student will be provided RTI or intervention services. No later than the 2015-2016 academic year, a school district shall have at least one individual to serve as a dyslexia interventionist