ALBERT SHANKER INSTITUTE
RUTGERS Graduate School of Education

STATE SCHOOL FINANCE PROFILE
2017-18 SCHOOL YEAR

ARKANSAS

Description: This 2017-18 profile of Arkansas's public K-12 school finance system focuses on three core indicators from the School Finance Indicators Database: fiscal effort, adequacy, and progressivity. These three measures provide a succinct but informative overview of how much Arkansas devotes to its public schools, the fairness of its system, and whether its funding levels are sufficient to meet common outcome goals.

CONTEXTUAL STATS	AR	U.S.
Child (5-17yo) poverty rate (%)	22.1	17.0
Public school coverage (%)	88.8	87.6
Pct. revenue from state sources	76.0	46.7
Total K-12 enrollment (U.S. rank)	496,085 (33)	

FISCAL EFFORT

Fiscal Effort is the amount a state spends directly on K-12 education as a percentage of its total "economic capacity," which we measure here in terms of Gross State Product (GSP).

Arkansas effort	4.13 %
U.S. average	3.43 %

- In FY 2018, Arkansas spent 4.13% of its economic capacity directly on K-12 education.
- This was 0.69 percentage points higher than the unweighted national average of 3.43%.
- Arkansas's effort level ranks #7 in the nation (out of 49).
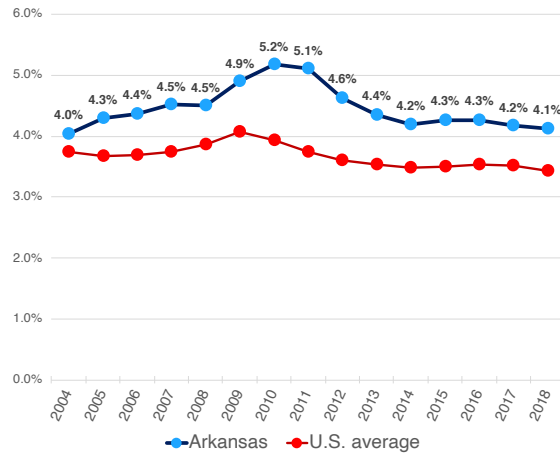
🔍 **Effort trends, 2004-18**
- Effort in AR increased in the years before the "Great Recession's" main impact on K-12 funding, going from 4.04% in 2004 to 4.89% in 2009.

Net change by period (% pts.)		
Period	AR	U.S.
2004-2009	0.85	0.33
2009-2018	-0.77	-0.64
2004-2018	0.09	-0.31

- This was followed by a decrease of 0.77 percentage points between 2009 and 2018.
- AR's effort was 0.09 percentage points higher in 2018 than in 2004.

ADEQUACY

Adequacy compares actual state and local per-pupil (PP) spending in each state to the estimated amount required to achieve national average test scores. These comparisons are presented, by district poverty quintile, in the center graph (in $), and in the right panel table (as percentage differences).

- Spending in Arkansas's highest poverty districts is $4,699 PP lower than the estimated adequate level ($15,298), a difference of -30.7%.
- Districts in Arkansas's second highest poverty quintile spend 26.6% less than the adequate level.
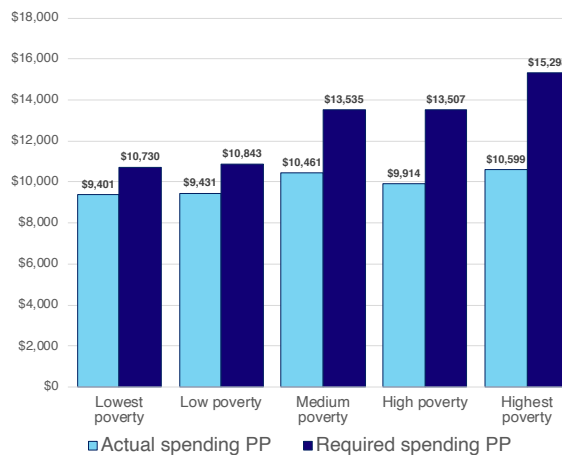
🔍 **Adequacy: AR vs U.S. average**
**Percent above / below adequate**

District poverty	AR	U.S.
Lowest poverty	-12.4	45.4
Low poverty	-13.0	11.4
Medium poverty	-22.7	-2.0
High poverty	-26.6	-15.1
Highest poverty	-30.7	-20.7

- In its highest poverty districts, Arkansas's spending is 30.7% below the adequate level, compared with a -20.7% U.S. average.
- Adequacy in Arkansas's highest poverty districts ranks #34 in the nation (out of 49).

PROGRESSIVITY

Progressivity is the degree to which states provide greater resources to districts serving higher need students. The center graph is the percentage difference in adjusted state and local revenue between: 1) lower (10%), middle (20%), and higher poverty (30%) districts and; 2) zero poverty districts.

- School funding in Arkansas is moderately progressive.
- Higher poverty districts receive 4.4% more revenue than zero poverty districts (this level of progressivity ranks #18 in the nation [out of 51]).
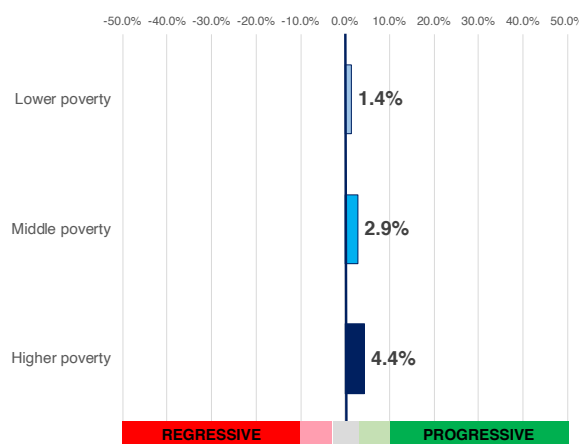
🔍 **Progressivity trend (30/0), 2002-18**
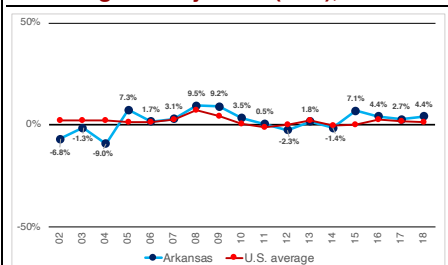
- AR's funding was more progressive in 2018 (4.4%) vs. 2002 (-6.8%).
- Since 2002, funding in the typical state (red line) is generally neither progressive nor regressive.

(ln)**SCHOOL** = b_0 + b_1State$_i$ + b_2LaborMarket$_{ij}$ +
b_3CWI$_{ij}$ + b_4**FINANCE**$_{ij}$ + b_5PopulationDensity$_{ij}$ +
b_6 Enrollment$_{ij}$ + b_7**INDICATORS**$_{ij}$ + b_8Scale$_{ij}$ +
b_9Poverty$_{ij}$ + b_{10}SchlType$_{ij}$ + b_{11}**DATABASE**$_i$ + e

NOTES ON DATA AND MEASURES
State School Finance Profiles 2017-18 (published 2021)

General

The data in this state profile are from the **School Finance Indicators Database** (SFID), a collection of public K-12 school finance and resource allocation indicators published annually by researchers from the Albert Shanker Institute and the Rutgers University Graduate School of Education. The purpose of the SFID is to provide sophisticated yet accessible school finance data and analysis to policymakers, journalists, parents, and the public. The primary product of the SFID is the State Indicators Database (SID), a state-level dataset containing roughly 125 variables. This profile focuses on three types of measures included in the SID: **fiscal effort**, **adequacy**, and **progressivity**. The full SID dataset, along with accessible documentation and other SFID tools and reports, are freely available to download at: schoolfinancedata.org. The following are some general notes about the profiles, followed by descriptions and notes pertaining to the three types of measures presented in this profile:

- The years in the profile refer either to the fiscal year or to the spring semester of the school year (e.g., 2018 is 2017-18). Note that the latest data in this profile (2017-18) predate the coronavirus pandemic by 2-3 years.
- Pre-2018 estimates may differ slightly from those in previous profiles, as all measures are recalculated every year to account for revised data.
- Due to rounding, changes and differences published in this profile may vary slightly from users' manual calculations.
- All poverty data used in the SFID and presented in these profiles are from the U.S. Census Bureau.
- The total number of states assigned rankings varies slightly by measure (as indicated), as not all measures are available in D.C. and Hawaii, and we've excluded Vermont from our 2018 effort and adequacy calculations due to irregularities in that state's data.
- **Non-SFID data sources** ("Contextual Stats" table): 1) Child (5-17 years) poverty (2018) from the U.S. Census Bureau's Small Area Income and Poverty Estimates (SAIPE) program; 2) see SFID documentation for sources used for coverage estimates; 3) percent of total (FY 2018) revenue from state sources from the U.S. Census Bureau Annual Survey of School System Finances; 4) total state public elementary and secondary school enrollment (Fall 2017) from the *2018 Digest of Education Statistics*, published by the National Center for Education Statistics.

Fiscal effort

Fiscal effort indicates how much of a state's total resources or capacity are spent directly on K-12 schools. It is calculated in the SFID by dividing total state and local expenditures (direct to education) by either Gross State Product (GSP) or aggregate state personal income. Both of these denominators are measures of a state's economic capacity; in the simplest terms, how much "money" does a state have? In this sense, effort measures how much each state spends as a percentage of how much it *might* spend. The former denominator (GSP) is used in these profiles, but the two are highly correlated, and the income-based effort indicator is available in the SID. Bear in mind that high capacity states with larger economies, such as New York and California, can put forth lower effort than lower capacity states, such as Mississippi and Alabama, but still produce the same revenue.

- U.S. effort averages are unweighted and do not include D.C. or Vermont (effort estimates are not calculated for the former, and estimates for the latter, which are not calculated in 2018, are excluded from all years to maintain the same set of states over time).
- The table in the right panel summarizes the graph in the center panel, with a focus on effort trends before and after the "Great Recession" of the late 2000s (comparing this state with concurrent changes in the U.S. average). 2009 is the "cutpoint" in the table because effort in the typical state was increasing until that year, and subsequently declined. Trends, however, vary by state, as is evident in some states' profiles.
- Note that even seemingly small changes or differences in effort levels represent large spending amounts, as the denominator is entire state economies.
- **SID variables used**: *effort*; *year*

Adequacy

Adequacy is typically defined as the extent to which the amount of funding for schools is sufficient for students to reach a given level of educational outcomes. The SFID's primary measure of adequacy compares, by poverty quintile, a state's actual state and local spending levels to estimates from models of how much that state would have to spend in order to achieve national average test scores in the prior year. The 2017-18 estimates in this profile are from the National Education Cost Model (NECM), which is part of the SFID. The NECM calculates required spending based on factors such as districts' labor costs, size, and their students' characteristics. For more information about the NECM, see the SFID documentation.

- The district poverty categories (e.g., lowest, low, medium, high, highest) are defined in terms of quintiles (i.e., 20 percentile increments).
- The U.S. averages in the right panel table are average percent differences between actual and required spending weighted by enrollment (this is a slightly different measure from that used in last year's profiles). Note, however, that the NECM defines poverty quintiles state-by-state, which means that the U.S. averages should be interpreted as an approximate snapshot of the national situation. In addition, three states are excluded from these U.S. averages: Hawaii (no adequacy estimates due to it being a single district state); D.C. (estimates only available for highest poverty quintile); and Vermont (no adequacy estimates this year due to data irregularities).
- **SID variables used** (each of these three sets of variables include five separate variables [*q1-q5*], one for each poverty quintile): *necm_predcost_q1—necm_predcost_q5*; *necm_ppcstot_q1—necm_ppcstot_q5*; *necm_enroll_q1—necm_enroll_q5*

Progressivity

A progressive school finance system is one in which districts serving larger shares of disadvantaged students (all else equal) are allocated more resources than their counterparts serving lower proportions of these students. In this profile, progressivity is calculated by comparing adjusted state and local revenue between districts with (U.S. Census) child poverty rates of zero to those with higher poverty rates (i.e., 10, 20, and 30 percent). In addition to child poverty, revenue is also adjusted for labor market costs, population density, and district size, all of which affect the value of the education dollar. For more details on the calculation of adjusted revenue, as well as alternative approaches to measuring progressivity, see the SFID documentation and annual report.

- In the left panel (first bullet), the progressivity of each state's system is characterized based on the percentage difference in adjusted state and local revenue between high (30%) and zero percent poverty districts (this is also the figure presented in the bottom bar of the center panel graph). The designations are assigned as follows: progressive (revenue in high poverty districts is at least 10% greater than that in zero poverty districts); moderately progressive (between +3% and +10%); neither progressive nor regressive (within three percentage points of zero); moderately regressive (between -3% and -10%); regressive (lower than -10%).
- In the graph in the center panel, "lower poverty" districts are those with 10 percent poverty, "middle poverty" districts have 20 percent poverty, and "higher poverty" districts have 30 percent poverty. Once again, the figures in the graph are percentage differences in adjusted state and local revenue between low/medium/high poverty districts and zero poverty districts. Note that the definitions of district poverty groups in this section, which are based on poverty rates (0, 10, 20, and 30), vary from those in the "Adequacy" section, in which district poverty is defined by quintiles.
- The graph in the right panel presents the trend in percentage difference between high (30%) and zero poverty districts, both for this state and on average across the U.S. The U.S. averages are unweighted and can be interpreted as 30/0 progressivity in the typical state in a given year.
- **SID variables used**: *predicted_slocrev0_*; *predicted_slocrev10_*; *predicted_slocrev20_*; *predicted_slocrev30_*; *year*