

University of Arkansas, Fayetteville

ScholarWorks@UARK

Arkansas Education Reports

Office for Education Policy

4-1-2005

Placing Arkansas School Funding Data in the National Context

Joshua H. Barnett

Follow this and additional works at: <https://scholarworks.uark.edu/oepreport>



Part of the [Educational Leadership Commons](#), and the [Education Policy Commons](#)

Citation

Barnett, J. H. (2005). Placing Arkansas School Funding Data in the National Context. *Arkansas Education Reports*. Retrieved from <https://scholarworks.uark.edu/oepreport/50>

This Report is brought to you for free and open access by the Office for Education Policy at ScholarWorks@UARK. It has been accepted for inclusion in Arkansas Education Reports by an authorized administrator of ScholarWorks@UARK. For more information, please contact scholar@uark.edu, uarepos@uark.edu.



ARKANSAS EDUCATION REPORT
Volume 2, Issue 2

PLACING ARKANSAS SCHOOL FUNDING DATA

IN THE NATIONAL CONTEXT

By:
Joshua Barnett

Spring 2005

Office for Education Policy
University of Arkansas
212 Graduate Education Building
Fayetteville, AR 72701
Phone: (479) 575-3773
Fax: (479) 575-3196
E-mail: oe@uark.edu
uark.edu/ua/oe

Placing Arkansas School Funding Data in the National Context

Abstract

In the *Lake View v Huckabee* school funding lawsuit, the Arkansas Supreme Court found the state's school funding system unconstitutional because it did not provide an "adequate and equitable" education to all students. In light of the court's ruling, this paper addresses the adequacy of the Arkansas system by examining levels of expenditure, teacher salary levels, and school performance. Further, this paper highlights the level of equity within the state of Arkansas as compared to other states in the nation using the Federal Range Ratio, the Coefficient of Variation, and the McLoone Index. Finally, data on the sources of revenue for schools in Arkansas as compared to other states are presented to shed light on revenue sources to meet the court's requirements.

Introduction

In November, 2002, lawmakers in Arkansas passed legislation to address the Arkansas Supreme Court ruling that the state's school funding system was unconstitutional. In the final ruling of the *Lake View* case, the Court mandated that the State develop a new plan to provide a "general, suitable and efficient system of free public schools equally available to all" as called for in the Arkansas Constitution (Article 14, § 1).

Of course, Arkansas is not unique in facing court-ordered school reform. In fact, the systems of school funding have been legally challenged in over 40 states since the 1960s. In the November 2002 *Lake View* ruling, the Court ruled that state policymakers must deal with key adequacy and equity issues related to both overall funding and teacher salaries. Given that these issues are not unique to Arkansas, viewing these challenges in the national context by presenting data on district funding levels, intra-state funding equity, funding revenue sources, teacher salaries, and school performance for each of the 50 states is worthwhile. In each case, the data for Arkansas will be compared to the national data and to the figures for several neighboring states.

This paper is organized in the following way. The next section describes the methodology and data sources. The results section addresses the adequacy of the Arkansas system by examining levels of expenditure, teacher salary levels, and school performance as measured by student scores on the National Assessment of Educational Progress (NAEP) exam. The results section also highlights the level of equity within the state of Arkansas as compared to other states in the nation using standard school finance equity measures such as the Federal Range Ratio, the Coefficient of Variation, and the McLoone Index. In addition, we illustrate how Arkansas compares to other states with regard to minority and poverty funding gaps—that is, what are the per-student funding gaps between the highest- and lowest-minority districts and the highest- and lowest-poverty districts. Finally, data on the sources of revenue for schools in Arkansas as compared to other states are presented in the results section of the paper to shed light on potential sources of the new revenue that the Court requires.

Methodology and Data Sources

The Arkansas court decision requires, in general, that the state improve with respect to the equity and adequacy of the school funding system. The data presented here can serve as a baseline for future comparisons to determine whether the State's reforms do result in improved equity and adequacy. Thus, this study is not intended to be a complicated analysis; rather, this is a straightforward descriptive study intended to assess the equity and adequacy of school funding in Arkansas as compared to the rest of the nation at the current time.

As valuable as it is to present national comparisons, there are drawbacks. Perhaps the most obvious relates to the comparability of national data. Just as there are differences in the ways that individual schools and districts gather and present data, various states present and gather data in unique and non-comparable ways. Consequently, any study intending to present

and compare national data must rely on national data sources that are based on a great deal of work to ensure that the data are as comparable as possible. Such datasets are generally collected and disseminated by credible sources such as the National Center for Education Statistics within the federal Department of Education. Thus, the strong point of such datasets are the comparability and the credibility of the source; the weak point is the fact that such data often require several years to be collected, “cleaned,” organized, and published.

As a result, much of the information presented here is based on the years 1999-2000 or 2000-2001. In general, the type of data presented here, such as statewide education spending per pupil, do not change a great deal on a year-by-year basis. Thus, we have confidence that the information presented in this article provides a fair representation of how Arkansas compares to the rest of the nation at the present time.

Arkansas’ standing with respect to educational adequacy will be assessed in multiple ways. Firstly, data on the level of education spending per pupil, as presented by the National Center for Education Statistics, will be presented by state.¹ Educational spending can be reported in numerous ways. Some studies report only instructional spending per pupil, others report current (excludes capital) expenditures per pupil, and others report total spending per pupil. While these categories are distinct, statewide comparisons are likely to yield similar results regardless of which categorization is employed. That is, if a state is ranked as a “high spender” based on instructional expenditures per pupil, that same state will most likely be ranked as a “high spender” based on total expenditures per pupil. This study presents data on total educational expenditures per pupil, as the focus is on overall adequacy of the system, but it is likely that the results would not change if the expenditure data presented were categorized in a

slightly different manner. The education spending per student values have been adjusted for regional cost differences using the NCES Geographic Cost of Education Index. Secondly, as the *Lake View* ruling dealt specifically with the need to increase teacher salaries and ensure adequate teacher salaries across the state, data on statewide teacher salaries is presented.²

Finally, a critical measure of the adequacy of a system is the outcome of that system. Thus, we present data on statewide student performance on the NAEP exam. The best available tool to assess statewide student performance is the NAEP exam, which is given to a representative group of fourth and eighth grade students in each participating state. The state NAEP exam measures the knowledge of fourth- and eighth-grade students in four subject areas: mathematics, reading, science, and writing. The 2003 NAEP assessments were given in all 50 states. The subject assessments have been developed collaboratively by teachers, curriculum experts, policymakers, and members of the public, and are generally regarded as good measures of student knowledge in the given subjects.³ The importance of the state NAEP exam was endorsed in 2001 with the reauthorization of the Elementary and Secondary Education Act, also referred to as the "No Child Left Behind" legislation. This legislation requires states receiving Title I funding to participate in the state NAEP reading and mathematics exams at grades 4 and 8 every two years. This paper uses the NAEP results in reading and math.

Arkansas' standing with respect to educational equity is assessed using standard measures of school funding equity.⁴ These indicators, including the Federal Range Ratio, the

¹ U.S. Department of Education, National Center for Education Statistics, "Revenues and Expenditures for Public Elementary and Secondary Education: School Year 2000-01," June 2003.

² Statewide average salary figures taken from Table I-7 State Rankings by 2001-02 Average Teacher Salary Adjusted by the 2001 AFT Interstate Cost of Living Index from Nelson and Drown, *Survey and Analysis of Teacher Salary Trends 2002*, 13. (www.aft.org/research)

³ <http://nces.ed.gov/nationsreportcard/>

⁴ Odden and Picus, *School Finance: A Policy Perspective*, 1992, 68-69.

Coefficient of Variation, and the McLoone Index, are measures of the inter-district variation in educational spending within each of the states. The Federal Range Ratio is based on a restricted range of spending per pupil between the districts at the 5th percentile of the spending distribution and the 95th percentile of the spending distribution. The restricted range is then divided by the spending figure for the district at the 5th percentile of the spending distribution to derive the Federal Range Ratio. Smaller values, indicating a smaller range between the highest and lowest spenders, are reflective of more equitable systems. The Coefficient of Variation is the standard deviation (a measure of dispersion) of the district spending per pupil divided by the mean value. A value of zero indicates perfect equity and a value of roughly 10 or below is considered desirable in terms of equity by many school finance experts.⁵ The McLoone Index is based on the number of dollars required to bring all students in districts below the state median spending level. The index value is equal to the actual amount spent on all students in districts below the median divided by the amount that would be required to bring all of these students up to the median level. A value of 1 indicates that all of the students are receiving at least the median level of expenditures and reflects perfect spending equity according to this index. Values of 90 percent or above are generally considered “equitable” for the McLoone Index.⁶ The calculations and results presented in the section on equity are based on district level spending data from the National Center for Education Statistics.⁷ We also present data from a recent Education Trust⁸ study on funding gaps within states between those districts with the highest and lowest minority

⁵ Hertert, Busch, and Odden, School Financing Inequities Among the States: The Problem from a National Perspective, *Journal of Education Finance*, 1994, 231-255.

⁶ *Ibid*

⁷ The values for the McLoone Index are based on Quality Counts 2004, (2004, January 8), *Education Week*, 17.

⁸ For more details on how these analyses were conducted, read "The Funding Gap: Low-Income and Minority Students Still Receive Fewer Dollars in Many States" The Education Trust, available at:

<http://www2.edtrust.org/NR/rdonlyres/EE004C0A-D7B8-40A6-8A03-1F26B8228502/0/funding2003.pdf>

enrollments and between those with the most and fewest number of students in poverty. This is a measure of the ability of the state to distribute funding equally to districts in need.

Finally, the *Lake View* ruling required major increases in state resources allocated to elementary and secondary education. As such, it is worthwhile to examine current uses and sources of revenue so that conclusions can be drawn regarding options for increased revenue. Not only will we draw upon educational spending data to describe the combination – in terms of state, local, and federal dollars – of funding sources, but we will also consider estimates of the sales, property, and income tax burdens for Arkansas and the rest of the nation.⁹ As our lawmakers search for areas in which to raise revenue, it is helpful to know whether Arkansas citizens are relatively “over-taxed” or relatively “under-taxed” in those various areas.

During the recent 2003-2004 special session of the Arkansas legislature, the strategy to raise the necessary revenue involved a variety of tax increases, the most prominent being a \$0.875 sales tax increase. Overall, the tax bill, which went into effect on March 1, 2004, is expected to raise about \$370 million in new tax revenue. Consequently, we will also review the elementary and secondary education spending in states throughout the nation over the previous decade and beyond to examine whether other states have faced such increases in the past.

Results

Using the data sources described above, Table 1 presents a national summary of key indicators of adequacy and equity. The figures for education spending per pupil, teacher salary, and NAEP reading scores are measures of adequacy. The Federal Range Ratio and the McLoone Index are measures of equity.

Table 1. *Summary of Educational Adequacy and Equity Statistics for the 50 States and the District of Columbia, 2000-2003*

State (1)	Total Enrollment (2)	Total Number of Districts (3)	Adjusted Education spending per Pupil (4)	Teacher Salary Adjusted (5)	2003 NAEP Reading Scores Grade 4 and 8 (6)	Federal Range Ratio (7)	McLoone Index (8)
Alabama	737,294	128	\$6,593	\$ 42,124	44%	28.50	93.5%
Alaska	134,358	53	\$7,275	\$ 39,893	55%	108.52	94.0%
Arizona	922,180	323	\$5,319	\$ 39,311	48%	65.30	94.2%
Arkansas	449,805	312	\$6,390	\$ 40,733	55%	36.32	95.4%
California	6,248,610	986	\$6,258	\$ 46,043	43%	29.70	92.8%
Colorado	742,145	178	\$6,662	\$ 40,192	73%	29.45	90.9%
Connecticut	570,228	166	\$8,797	\$ 48,477	80%	63.71	94.4%
Delaware	115,555	19	\$8,753	\$ 52,908	61%	44.20	93.8%
Wash DC	75,392	1	\$11,216	\$ 44,974	20%	NA	NA
Florida	2,500,478	67	\$6,447	\$ 41,401	59%	19.98	95.7%
Georgia	1,470,634	180	\$7,439	\$ 47,731	53%	41.62	93.2%
Hawaii	184,546	1	\$6,614	\$ 31,761	43%	NA	NA
Idaho	246,521	114	\$6,221	\$ 42,343	62%	49.54	93.3%
Illinois	2,071,391	893	\$7,407	\$ 50,436	66%	116.01	87.5%
Indiana	996,133	294	\$8,163	\$ 48,293	66%	54.93	92.2%
Iowa	485,932	371	\$7,856	\$ 42,777	71%	33.55	95.2%
Kansas	470,205	304	\$7,743	\$ 41,293	68%	59.43	93.9%
Kentucky	654,363	176	\$6,800	\$ 42,663	65%	33.64	92.2%
Louisiana	731,328	66	\$6,756	\$ 40,390	42%	28.20	95.1%
Maine	205,586	282	\$8,389	\$ 35,520	73%	56.53	91.4%
Maryland	860,640	24	\$8,090	\$ 50,422	63%	37.17	94.3%
Massachusetts	973,140	350	\$8,110	\$ 42,051	83%	69.74	90.0%
Michigan	1,730,668	554	\$8,151	\$ 53,822	64%	53.37	92.0% ⁵
Minnesota	851,384	417	\$7,797	\$ 41,556	74%	83.74	91.6%
Mississippi	493,507	152	\$5,938	\$ 38,025	39%	44.73	93.3%
Missouri	909,792	524	\$7,012	\$ 40,040	68%	73.63	92.0%
Montana	151,947	452	\$7,402	\$ 36,834	72%	110.48	95.2%
Nebraska	285,095	555	\$8,156	\$ 40,140	67%	47.84	93.4%
Nevada	356,814	17	\$6,095	\$ 45,186	41%	17.26	100.0%
New Hampshire	206,847	178	\$6,952	\$ 39,258	80%	59.48	92.3%
New Jersey	1,341,656	603	\$9,762	\$ 41,540	76%	72.93	91.9% ⁴
New Mexico	320,260	89	\$6,794	\$ 36,832	39%	56.67	96.5%
New York	2,872,132	703	\$9,555	\$ 42,805	69%	65.36	94.9%
North Carolina	1,315,363	121	\$6,917	\$ 45,505	62%	33.08	95.2%

⁹ Estimates for statewide sales, property, and income tax burdens are drawn from "Tax Rates and Tax Burdens in the District of Columbia – A Nationwide Comparison 2002," issued August 2003 by the Government of the District of Columbia.

North Dakota	106,047	222	\$7,183	\$ 35,050	70%	57.42	92.4%
Ohio	1,830,985	662	\$7,661	\$ 46,953	68%	61.58	92.4%
Oklahoma	622,139	543	\$6,676	\$ 37,646	56%	44.45	93.3%
Oregon	551,480	198	\$7,791	\$ 46,293	64%	29.79	95.3%
Pennsylvania	1,821,627	501	\$8,009	\$ 54,960	65%	56.70	92.7%
Rhode Island	158,046	36	\$8,448	\$ 44,678	59%	29.83	92.6%
South Carolina	691,078	89	\$7,325	\$ 44,247	50%	40.18	93.9%
South Dakota	127,542	176	\$7,246	\$ 35,367	72%	55.52	92.9%
Tennessee	925,030	138	\$6,232	\$ 43,172	52%	38.91	92.5%
Texas	4,163,447	1,040	\$6,937	\$ 44,110	53%	34.87	94.6%
Utah	484,677	40	\$4,895	\$ 41,703	64%	34.59	95.1%
Vermont	101,179	292	\$9,255	\$ 40,163	76%	84.80	85.8% ⁴
Virginia	1,163,091	137	\$7,513	\$ 44,041	69%	48.74	94.9%
Washington	1,009,200	296	\$6,501	\$ 43,015	66%	34.18	91.8%
West Virginia	282,885	55	\$8,409	\$ 42,124	54%	24.74	95.7%
Wisconsin	879,361	433	\$8,618	\$ 43,251	70%	42.22	92.9%
Wyoming	88,128	48	\$8,555	\$ 41,033	68%	43.43	93.6%
United States	47,687,871	14,559	\$7,376	\$ 44,367	60%	103.92	NA

Table 1: Notes and Definitions

Total Enrollment and Number of Districts: Data collected from the Common Core of Data, Overview of Public Elementary and Secondary School and Districts 2000-2001.

Adjusted Education spending per Pupil: Education spending per student, adjusted for regional cost differences 2001; Data Taken from the NCES "Revenues and Expenditures" 2001 report (using 2000-2001 spending data).

Teacher Salary Adjusted: State average salaries are adjusted for differences in cost of living. Data Taken from the American Federation of Teachers Survey and Analysis of Teacher Salary Trends 2002 Report (Table I-7)

2003 NAEP Reading Scores Grade 4 and 8: The percent of students scoring at proficient level or higher were calculated for both Grade 4 and Grade 8 and were then added together to create a rough index of overall performance for both grades. Data Taken from The Nation's Report Card, <http://nces.ed.gov/nationsreportcard/reading/results2003/>

Federal Range Ratio: Data collected by authors based on 1999-2000 district level data.

McLoone Index: Figures adjusted to reflect the regional cost differences and weighted for student needs. Students in poverty equal 1.2 and students in special education equal 1.9. Data based on 2000-2001 district level data and taken from January 8, 2004 *Education Week Quality Counts 2004 Annual Report*.

Educational Adequacy

According to the *Lake View* decision, the State of Arkansas has neglected to ensure that each Arkansas student has an “adequate” education. As a means of examining the adequacy of the education provided in Arkansas, we first compared the historical expenditures per pupil in

Arkansas to the expenditures per pupil in surrounding states and the nation (see Table 2). The examination of the expenditures over the last four decades in Arkansas and throughout the United States reveals several trends. First, since 1960, Arkansas has spent less per pupil than most other states. Educational spending per pupil in Arkansas has remained about 20 percent behind the national expenditures, but Arkansas spending has also lagged behind the expenditures in neighboring states. If the expenditures are adjusted, however, to allow for differences in cost of living between the states, the standing of Arkansas becomes a bit more favorable. However, even when using the adjusted data (see Table 1, column 4), Arkansas remains among the lowest spending states in the nation, ranking 44 out of 51 states in 2000-2001.

Table 2. *Unadjusted Total Expenditures Per Pupil: 1960-2000 for Arkansas and Neighboring States*

	1959- 1960	1969- 1970	1979- 1980	1989- 1990	1994- 1995	1999- 2000
Arkansas	\$225	\$568	\$1,574	\$3,485	\$4,459	\$5,628
Louisiana	\$372	\$648	\$1,792	\$3,903	\$4,769	\$6,256
Mississippi	\$206	\$501	\$1,664	\$3,094	\$4,080	\$5,356
Missouri	\$344	\$709	\$1,936	\$4,507	\$5,383	\$6,764
Oklahoma	\$311	\$604	\$1,926	\$3,508	\$4,845	\$5,770
Tennessee	\$238	\$566	\$1,635	\$3,664	\$4,388	\$5,521
Texas	\$332	\$624	\$1,916	\$4,150	\$5,222	\$6,161
US Average	\$375	\$816	\$2,272	\$4,980	\$5,989	\$7,392
AR Diff. From US Avg.	\$-150	\$-248	\$-698	\$-1,495	\$-1,530	\$-1,764
AR Rank of 51 (high=1)	49	47	51	47	46	48

Source: Data from National Council for Education Statistics Digest of Education Statistics, 2001.

Arkansas also resides among the lowest spenders in the nation with respect to average teacher salaries. Table 3 below compares the average teacher salaries in Arkansas to neighboring states and the national average over the last decade. While the average teacher salaries in Arkansas are higher than salaries in several surrounding states, Arkansas' teacher

salaries remain well below the national average and have been for at least the past decade. In fact, in 2002, Arkansas ranked 46 among the states in terms of average teacher salary. Of course, some of this difference is due to the fact that the cost of living throughout the state of Arkansas is lower than throughout the nation as a whole. After controlling for cost of living differences, the Arkansas ranking improves to 35, with the average Arkansas teacher salary trailing the national average by more than \$3,500. The data presented in Table 3 are average salary data rather than starting salary data. While starting salaries are lower overall than average salaries, the state rankings remain constant regardless of which salary category is presented. With respect to starting salary in 2002, Arkansas ranked 43 among the states.

Table 3. *Teacher Salary Comparison 1991-2002*

	Average Salary 1991	Average Salary 1997	Average Salary 2002	*Adjusted Average Salary 2002
Arkansas	\$27,168	\$30,987	\$36,026	\$40,733
Louisiana	\$26,411	\$28,347	\$36,328	\$40,390
Mississippi	\$24,368	\$27,662	\$33,295	\$38,025
Missouri	\$28,923	\$33,143	\$36,053	\$40,040
Oklahoma	\$26,514	\$30,187	\$32,870	\$37,646
Tennessee	\$28,621	\$34,267	\$38,515	\$43,172
Texas	\$29,719	\$32,426	\$39,230	\$44,110
US Average	\$34,213	\$38,436	\$44,367	\$44,367
AR Diff. From US Avg.	-\$7,045	-\$7,449	-\$8,341	-\$3,634
AR Rank of 51 (high=1)	42	44	46	35

Source: American Federation of Teachers, Survey and Analysis of Teacher Salary Trends, 2002

* Adjusted Salary data based on Inter-State Cost of Living index calculated by AFT.

As another indicator of adequacy, the performance of students is examined using the NAEP exams. Table 4 presents the percent of students in Arkansas scoring at or above proficient levels in math and reading on the most recent NAEP assessments. As compared to students across the country, Arkansas students performed near the national average in reading

but did not fare as well in math. While 30 percent of the nation's fourth graders and 30 percent of the eighth graders earned scores of proficient or better on the 2003 NAEP reading assessment, 28 percent of Arkansas' fourth graders and 27 percent of Arkansas' eighth graders performed similarly well. On the 2003 NAEP math assessment, 26 percent of Arkansas' fourth graders achieved proficiency (compared to 31% nationally) and 19 percent of Arkansas' eighth graders reached proficiency (compared to 27% nationally). The national ranking highlights the relatively low level of math achievement. On the Grade 4 and Grade 8 NAEP, Arkansas' performance ranks in the bottom quartile of the 51 states.

Table 4. *State Level Results for NAEP 2003 Reading and Math, Grades 4 and 8*

Percent of Students Scoring at or Above Proficient Level	2003 Reading, Grade 4	2003 Reading, Grade 8	2003 Math, Grade 4	2003 Math, Grade 8
Arkansas	28%	27%	26%	19%
Louisiana	20%	22%	21%	17%
Mississippi	18%	21%	17%	12%
Missouri	34%	34%	30%	28%
Oklahoma	26%	30%	23%	20%
Tennessee	26%	26%	24%	21%
Texas	27%	26%	33%	25%
US Average	30%	30%	31%	27%
AR Diff. From US Avg.	- 2%	- 3%	- 5%	- 8%
AR Rank of 51 States (high=1)	36	35	39	45

Source: National Assessment of Educational Progress, <http://nces.ed.gov/nationsreportcard/>

What does this quick overview of educational adequacy in Arkansas suggest? The data presented here indicate that students in Arkansas, as compared to their peers across the nation, have access to lower levels of educational funding, are instructed by teachers earning comparatively lower salaries, and perform relatively poorly on national educational assessments. However, the Court wanted Arkansas to provide more than an adequate education; Arkansas

should also provide an equitable educational system. Before drawing conclusions on the adequacy of the system, we present data related to the equity of Arkansas' school system.

Educational Equity

Most of the school funding litigation throughout the United States over the past four decades has been focused on inequities in the distribution of funds to school districts within a given state. Hence, this section will present data on traditional measures of school funding equity for the state of Arkansas as compared to the rest of the nation.

Columns 7 and 8 in Table 1 present data on the Federal Range Ratio and McLoone Index for each of the 50 states and the District of Columbia. However, measures of inter-district equity within states are not applicable for the District of Columbia, which is a single school district, or for the state of Hawaii, which operates as a single statewide district. Thus, equity statistics are presented for only 49 of the states. For each of the equity statistics examined here, Arkansas' funding distribution earns higher than average equity scores. Based on the McLoone Index, which reflects the equity in the bottom half of the state's spending distribution, Arkansas is ranked as one of the ten most equitable states in the nation. Based on the Federal Range Ratio and the Coefficient of Variation (Table 5), both of which reflect the overall dispersion of the distribution, Arkansas ranks among the twenty most equitable states in the nation. Additionally, for each of these equity measures, Arkansas compares favorably to its neighboring states (Table 5). For example, the difference in funding between the districts in the 5th percentile and the 95th percentile is \$1,696 in Arkansas; in Illinois, one of the less equitable states, the difference is much greater at \$5,733.

Table 5. *Equity Statistics Based on Total Education Spending Per Pupil, 1999-2000*

	McLoone Index	Federal Range Ratio	Coefficient of Variation
Arkansas	95.4%	36.32	11.1%
Louisiana	95.1%	28.20	8.2%
Mississippi	93.3%	44.73	11.6%
Missouri	92.0%	73.63	34.8%
Oklahoma	93.3%	44.45	13.5%
Tennessee	92.5%	38.91	12.5%
Texas	94.6%	34.87	11.6%
AR Rank of 49 States (high=1)	6	18	17

Source: McLoone Index taken from 2000-2001 data from Quality Counts 2004, published by *Education Week*. Federal Range Ratio and Coefficient of Variation computed by authors using 1999-2000 district level educational funding per pupil from the National Center for Education Statistics.

This quick overview of educational funding equity in Arkansas suggests that the distribution of educational funding to districts throughout the state is relatively equitable. Given that the majority (60% in 2000-2001, see Table 6) of educational funding in the state of Arkansas is provided centrally by the state, it is not surprising that the district-level disparities are relatively small as compared to those in other states. While these comparisons show that Arkansas is relatively equitable, another way to compare the states on funding equity is to compare the minority and poverty funding gaps between the districts. These equity analyses are based on a 2003 study by the Education Trust entitled “The Funding Gap”.¹⁰

According to the Education Trust analysis, students in the districts with the highest percent of minority students actually receive \$173 more in state and local funding per pupil than

do their peers in the districts with lowest percent of minority students. By this measure, funding in Arkansas appears equitable and ranks higher than 39 other states on this measure. With respect to funding low poverty and high poverty districts, Arkansas also appears to be quite equitable. In 2001, the lowest poverty districts received \$300 more per-student funding than the highest poverty districts. On this measure, Arkansas ranks 26 of 49 states.

The *Lake View* ruling focused on the adequacy and equity of the system of school funding in the state of Arkansas and the data presented here provide some baseline information as to how our state compares with other states nationwide on measures of adequacy and equity. Additionally, the Supreme Court ruling required a major increase in funding for K-12 education. Consequently, the section that follows examines the current sources and levels of revenue for schools in Arkansas. An exploration into the educational revenue sources used by Arkansas—as compared to those in other states—can shed light on potential sources of monies required to meet the court's mandate.

Education Revenue Sources

The *Lake View* ruling required major increases in state resources allocated to elementary and secondary education in the state of Arkansas. A quick review of the current mix of educational funding sources shows that a relatively high proportion of educational funding is provided centrally by the state. While the average state in the nation provides 50 percent of total elementary and secondary education funding from state resources, the state of Arkansas provides 60 percent of the total funds. Locally provided funds constitute only 31 percent of the total school funding in Arkansas, as compared to an average of 43 percent across the nation (Table 6).

¹⁰ For more details on how these analyses were conducted, read "The Funding Gap: Low-Income and Minority Students Still Receive Fewer Dollars in Many States" The Education Trust, available at:

In terms of revenue-raising strategies, data from 2002 indicate that Arkansans are relatively “over-taxed” by sales and income taxes and “under-taxed” by property taxes. The estimated property tax burden for Arkansas is \$1.38 for every \$100 of property value; the national average effective property tax burden is \$.23 higher at \$1.61. The state’s 2002 sales tax rate of 5.125 percent was roughly one-half a percentage point above the national average of 4.613 percent (Table 7). Arkansas taxpayers also rank 21 of 51 for income tax burden and 19 of 51 for sales tax burden, which indicates that Arkansas taxpayers are relatively “over-taxed” in those areas. The implications of this situation will be discussed in the section that follows.

<http://www2.edtrust.org/NR/rdonlyres/EE004C0A-D7B8-40A6-8A03-1F26B8228502/0/funding2003.pdf>

Table 6. *Percent of Educational Funding Derived from Local, State, and Federal Sources, 2000-2001*

	Local Taxes	State Taxes	Federal Taxes
Arkansas	31%	60%	9%
Louisiana	39%	49%	11%
Mississippi	31%	55%	14%
Missouri	55%	38%	7%
Oklahoma	29%	60%	10%
Tennessee	46%	44%	9%
Texas	49%	42%	9%
US Average	43%	50%	7%
AR Diff. From US Avg.	-12%	+ 10%	+ 2%
AR Rank of 51 States (high=1)	38	13	32

Source: Common Core of Data, National Public Education Finance Survey, 2001

Table 7. *Estimated Tax Rates for Income, Property, and Sales Tax based on Largest City, 2002*

	Income Tax (for annual income = \$50,000)	Property Tax (effective rate per \$100)	State Sales Tax Rate
Arkansas	3.30%	1.38	5.125%
Louisiana	2.60%	1.70	4.000%
Mississippi	2.20%	1.69	7.000%
Missouri	4.00%	1.14	4.225%
Oklahoma	3.80%	1.16	4.500%
Tennessee	0.00%	1.76	7.000%
Texas	0.00%	2.62	6.250%
US Average	3.20%	1.61	4.613%
AR Diff. From US Avg.	+0.10%	- 0.23	+0.512%
AR Rank of 51 States (high=1)	21	31	19

Source: Tax Rates and Tax Burdens In The District of Columbia - A Nationwide Comparison, 2002. For income and property tax, estimate is based on taxes charged within the largest city of each state.

Conclusions and Implications

Based on the issues brought to light in the *Lake View* ruling, this article presents data comparing Arkansas to the nation and neighboring states with regard to educational adequacy, equity, and revenue sources. The data related to adequacy show that Arkansas has spent less per-

pupil than almost every other state over the last forty years (see Table 2), that the average salaries for Arkansas teachers places Arkansas in the lower half of states (ranking 35), and that Arkansas students seem to underperform on the NAEP (see Table 4). These data lead to one conclusion—the school system in Arkansas, prior to the *Lake View* ruling, did not appear to be providing an adequate education to all students, according to the three indicators of adequacy explored here.

A second point of contention in the *Lake View* litigation was the equity of school funding. Our examination of the Federal Range Ratio, the Coefficient of Variation, the McLoone Index, and the funding gaps, suggests that school funding for elementary and secondary students is distributed among the districts in a relatively equitable fashion. Thus, criticisms of the equity of school funding in Arkansas may not be well founded.

Finally, with regard to the new sources of revenue for Arkansas' school system, the data suggest that, as compared to other states across the nation, Arkansas could increase the local share in education funding through the use of local property taxes, given that the income tax and sales tax rates are comparatively higher. However, other constraints, such as the ability of the legislature to influence property tax rates, might lead Arkansas policymakers to pursue other strategies. Moreover, an increased reliance on local property taxes would likely lead to less favorable equity rankings for the state.

Perhaps for the reasons stated above, the legislature responded to the need for more resources by establishing Act 107, which increased the state sales tax rate from 5.125 percent to 6.000 percent. The bill is expected to generate more than \$370 million in new educational

resources each year.¹¹ The total state appropriation to elementary and secondary education in 2003-2004 was \$1.84 billion; due to the new tax dollars and other appropriations, the proposed 2004-2005 budget is \$2.29 billion.¹² This increase represents an increased state commitment of more than 24 percent in a single year. To place the magnitude of this increase into perspective, we reviewed total state spending on education from 1987-1988 to 2000-2001 for all 50 states and computed the annual percentage increases, a total of 650 data points. Of these 650 cases in which we computed the annual percentage increase in total state education funding, we found only 20 cases of increases greater than the 24 percent facing Arkansas next year. Further, the average annual increase in state funds for all 50 states during this time period was approximately 7 percent.

Thus, while increases in state funding in Arkansas for the 2004-2005 school year is not without precedent (Arkansas, in fact, increased its state funding by just over 20% in 1988), it did represent a major increase in the state's commitment to elementary and secondary education in Arkansas. Notwithstanding, in October 2005, the Arkansas Supreme Court appointed Special Masters found that Arkansas did not continue its commitment to education. The Special Masters report indicated that the Arkansas legislature had not adequately increased funding for the 2005-06 school year. As the situation in Arkansas continues to unfold, many observers of school finance both within Arkansas and around the country will be watching to see how the state's schools employed the great infusion of new resources in 2004-05 and why that money was determined to be insufficient by the Special Masters.

¹¹ James Jefferson, Associated Press, "Senate approves \$377 million sales tax plan, \$8 million corporate franchise," February 6, 2004.

¹² Figures based on personal communication (June 3, 2004) with the Public School Finance and Administrative Support unit of the Arkansas Department of Education.