Is School Funding Fair?
A National Report Card

Bruce D. Baker, Rutgers University
David G. Sciarra, Education Law Center
Danielle Farrie, Education Law Center

Is School Funding Fair? A National Report Card

Bruce D. Baker, Rutgers University

David G. Sciarra, Education Law Center

Danielle Farrie, Education Law Center

September 2010

About the Authors

Bruce Baker is Associate Professor in the Department of Educational Theory, Policy and Administration in the Graduate School of Education at Rutgers University. He is coauthor of *Financing Education Systems* with Preston Green and Craig Richards, author of numerous peer-reviewed articles on education finance, and sits on the editorial boards of the *Journal of Education Finance* and *Education Finance and Policy* as well as serving as a research fellow for the Education and the Public Interest Center.

David Sciarra is Executive Director of the Education Law Center (ELC) in Newark, New Jersey. A practicing civil rights lawyer since 1978, he has litigated a wide range of cases involving socioeconomic rights, including affordable housing, shelter for the homeless, and welfare rights. Since 1996, he has litigated to enforce access for low-income and minority children to an equal and adequate education under state and federal law, and served as counsel to the plaintiff students in New Jersey's landmark *Abbott v. Burke* case. He also does research, writing, and lecturing on education law and policy in such areas as school finance, early education, and school reform.

Danielle Farrie is Research Director at the Education Law Center (ELC). She maintains a large database of educational data and conducts analysis to support litigation and public policy for ELC and partner organizations. Before joining ELC, she conducted research in the field of urban education on such topics as school choice, white flight and school segregation, and has coauthored several peer-reviewed articles on parental involvement among low-income families. She holds a Ph.D. in Sociology from Temple University.

Acknowledgements

For more information and to download copies of this report, go to **www.schoolfundingfairness.org**.

Table of Contents

Figures and Tables

I. Introduction

Why Our Nation Needs Fair School Funding

Education has always been the cornerstone of freedom and democracy, and key to economic prosperity. But never before in our history has education been more crucial to the collective future of our nation and to the individual futures of our young people. Our public schools must strive to provide equality in educational opportunity unlike at any time in the nation's history. The demand is urgent and growing to educate all students to meet rigorous academic standards, and to prepare them for post-secondary education and an increasingly specialized workforce in the global economy. Accomplishing this goal means significantly narrowing, if not closing, longstanding and stubborn gaps in achievement that exist among subgroups of the nation's students.[1] These daunting educational challenges are compounded by fundamental changes in our economy and labor markets, and a seismic shift in our nation's demographics.[2]

Meeting the equal-opportunity challenge in education requires funding all public schools at levels sufficient to provide a rigorous curriculum in a broad range of subject areas, delivered by well-trained teachers, and supported by effective school and district leaders. It also requires sufficient funds for schools serving high numbers of low-income students, English-language learners, and students with other special needs. Concentrated student poverty in schools generates greater needs that, in turn, require resources to support effective programs and strategies such as high-quality early education, full-day kindergarten, after-school and summer-school programs, and smaller classes in the early grades.[3]

Of course, funding alone will not lead to better academic performance and outcomes for students. Funding also must be invested wisely, focusing on key areas such as quality teaching, strong curriculum, programs for struggling students, effective supervision, and sufficient supports for districts and schools from state education agencies and institutions of higher education.[4] High-poverty schools need sufficient funds, effectively and efficiently used, to achieve established outcome goals and prepare their students for high school graduation and for post-secondary education or the workforce.

How we fund our public schools is, therefore, fundamental to the national effort to ensure all students have access to high quality educational opportunities that prepare them to assume the responsibilities of citizenship and to succeed in the economy.[5] Sufficient school funding, fairly distributed to districts to address concentrated poverty, is an **essential precondition** for the delivery of a high-quality education in the 50 states. The National Report Card on Fair School Funding is designed to shed new light on this urgent and critical issue.

---

[1] Paul Barton and Richard Coley, *Parsing the Achievement Gap II*, Policy Information Report, Policy Information Center, Educational Testing Service, 2009.

[2] Irwin Kirsch, Henry Braun, Kentaro Yamamoto, and Andrew Sum, *America's Perfect Storm: Three Forces Changing Our Nation's Future,* Policy Information Report, Policy Information Center, Educational Testing Service, 2007.

[3] "School Finance and the Achievement Gap: Funding Programs that Work," ETS Policy Notes, Policy Information Center, Educational Testing Service, 2008.

[4] See e.g., Linda Darling Hammond, *Flat World and Education: How America's Commitment to Equity Will Determine our Future*, Teachers College Press, 2010.

[5] Bruce D. Baker and Kevin Welner, *School Finance and the Courts: Does Reform Matter and How Can We Tell?* Teachers College Record, forthcoming.

U.S. Public Education: Decentralized, With Concentrated Poverty

Two features dominate the landscape of public education in the United States and heavily influence education cost and funding: decentralization and concentrated student poverty.

First, kindergarten through 12th grade (K – 12) public education in the United States is highly decentralized, provided through separate systems operated by the 50 states.[6] The 50 states, in turn, have established about 16,000 school districts and 100,000 schools for the purpose of delivering K – 12 education to students at the local level. These districts and schools — and the education of the students who attend these schools — are funded through financing systems authorized and administered by the 50 states, under mechanisms commonly known as the state school funding "formula." These formulas deliver some combination of state and local revenues to schools, supplemented by a small amount of federal education aid. The most recent national data show the state share at 46.5 percent, the local share at 44.4 percent, and the federal share at 9.1 percent of public school spending.[7]

Second, state K – 12 public education systems face the challenge of educating extraordinarily high numbers of students in poverty. Using the U.S. Census standard, the national average for child poverty in the nation's public schools is 16%. Nine states have child poverty rates of over 20%, with Mississippi at 26% and Louisiana and Washington, D.C. at 25%. While the Census poverty rate differentiates above and below poverty at 100% of the federal poverty level (approximately $20,000 for a family of four), it is more common in education to assess poverty levels using eligibility for the federal free and reduced-price lunch (FRL) program. The threshold for this program is 185% of the federal poverty level, or approximately $37,000 for a family of four. When poverty rates are expressed in this commonly used metric for student poverty, the national rate is 41%. Eleven states have average FRL rates over 50%, with Mississippi (68%) and New Mexico (61%) topping the list. In California, the nation's largest public school system, the student poverty rate is 50%, with more than 3 million children qualifying for federal free and reduced-price lunch.[8] (See Appendix A for both child and student poverty rates for all states.)

Even more striking than the child and student poverty rates is the extent to which poverty is **concentrated** in school districts within states (see Table 1). Fourteen states serve at least 10% of their student population in districts with Census poverty rates over 30%. Mississippi serves one-third of its students in these high-poverty schools. Eleven states serve fewer than 10% of their student population in low-poverty school districts, or districts with poverty rates below 10%.

---

[6] Unlike other countries, the United States has no national right to education. The legal right and responsibility to provide education rests with each of the 50 states. David G. Sciarra, *Enhancing Court Capacity to Enforce Education Rights, Foundation for Law, Justice and Society*, Oxford University (2009).

[7] "Percentage distribution of revenues for public elementary and secondary education in the United States, by source: 2006-07." U.S. Department of Education, Education Finance Statistics Center. (http://www.nces.ed.gov/edfin/graph_topic.asp?INDEX=4)

[8] U.S. Census Bureau, Small Area Income and Poverty Estimates, "School District Data Files," 2007; U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "Public Elementary/Secondary School Universe Survey," 2006 – 07.

2

Is School Funding Fair? A National Report Card

Table 1: Concentrated Student Poverty in U.S. School Districts

State	Under 10%			10% to 20%			20% to 30%			Over 30%		
	Districts	Enrollment	% Enrollment	Districts	Enrollment	% Enrollment	Districts	Enrollment	% Enrollment	Districts	Enrollment	% Enrollment
Alabama	6	59,951	8	30	267,579	36	69	354,823	48	26	60,920	8
Alaska	20	99,932	76	16	17,360	13	9	9,148	7	8	5,757	4
Arizona	22	176,016	18	86	529,590	55	56	157,597	16	52	103,860	11
Arkansas	4	13,950	3	70	185,668	39	118	198,913	42	52	74,855	16
California	306	1,544,047	25	398	2,826,145	46	208	1,633,618	26	57	196,125	3
Colorado	43	369,032	47	80	259,898	33	34	151,751	19	21	9,530	1
Connecticut	150	401,028	73	10	70,107	13	6	78,095	14			
Delaware	2	8,658	8	13	96,537	89	1	3,300	3			
District of Columbia							1	56,943	100			
Florida	3	128,988	5	43	2,391,268	90	19	127,236	5	2	8,684	0
Georgia	9	436,509	27	52	613,301	38	78	417,565	26	41	161,034	10
Hawaii	1	180,728	100									
Idaho	13	73,605	28	78	162,732	62	22	25,272	10			
Illinois	367	833,757	40	369	584,108	28	107	646,098	31	16	29,385	1
Indiana	100	315,039	30	159	552,557	53	30	145,974	14	3	21,018	2
Iowa	165	221,922	46	183	248,473	51	14	12,290	3			
Kansas	81	184,879	40	189	243,583	52	23	39,197	8			
Kentucky	11	59,044	9	51	324,613	50	60	154,573	24	52	107,819	17
Louisiana				11	153,026	23	35	357,819	55	22	142,838	22
Maine	68	67,925	35	146	100,825	52	51	20,758	11	16	3,335	2
Maryland	12	673,737	79	10	90,447	11	2	87,456	10			
Massachusetts	232	560,576	61	56	185,434	20	7	122,051	13	4	49,817	5
Michigan	166	642,453	40	266	557,149	35	95	199,455	12	25	202,717	13
Minnesota	162	527,093	65	149	185,559	23	24	90,755	11	3	1,671	0
Mississippi	2	39,602	8	25	117,508	24	59	173,730	35	63	162,194	33
Missouri	81	293,345	32	218	369,452	41	173	178,086	20	50	69,259	8
Montana	67	18,012	13	206	99,902	70	112	17,964	13	40	7,756	5
Nebraska	68	92,607	33	147	181,147	64	27	8,585	3	4	1,178	0
Nevada	3	17,143	4	13	404,972	96	1	667	0			
New Hampshire	120	130,309	66	49	66,218	33	4	1,563	1			
New Jersey	436	898,932	67	107	220,095	16	22	196,773	15	5	26,983	2

Table 1: Concentrated Student Poverty in U.S. School Districts (continued)

State	Under 10%			10% to 20%			20% to 30%			Over 30%		
	Districts	Enrollment	% Enrollment	Districts	Enrollment	% Enrollment	Districts	Enrollment	% Enrollment	Districts	Enrollment	% Enrollment
New Mexico	2	18,363	6	28	164,710	50	35	90,237	28	24	54,506	17
New York	310	979,630	36	289	523,805	19	75	1,144,544	42	9	105,936	4
North Carolina	4	173,145	12	54	813,670	57	44	366,235	26	13	62,978	4
North Dakota	56	46,288	49	99	41,707	44	20	3,095	3	10	3,173	3
Ohio	248	680,094	39	256	612,212	35	88	267,761	15	22	198,578	11
Oklahoma	40	102,331	16	228	248,987	39	204	253,677	40	66	33,096	5
Oregon	24	122,714	22	108	347,217	63	59	81,896	15	3	30	0
Pennsylvania	202	831,805	47	225	511,020	29	62	178,488	10	12	239,138	14
Rhode Island	26	74,075	50	6	29,570	20	2	15,535	11	2	28,681	19
South Carolina	3	46,929	7	30	358,700	51	36	261,774	37	16	34,177	5
South Dakota	43	50,693	42	77	53,947	45	24	6,856	6	17	8,016	7
Tennessee	4	124,635	13	44	375,619	38	72	327,809	34	15	150,021	15
Texas	135	770,987	17	412	1,582,676	35	334	1,440,475	32	149	717,237	16
Utah	17	310,092	62	18	145,398	29	4	45,604	9	1	2,985	1
Vermont	130	47,589	53	117	38,313	43	20	3,093	3			
Virginia	39	701,748	57	56	307,764	25	35	177,830	15	4	33,098	3
Washington	75	388,378	38	135	520,269	51	68	99,752	10	17	17,633	2
West Virginia	1	8,043	3	22	127,538	45	26	127,762	45	6	17,955	6
Wisconsin	221	442,371	51	175	318,170	37	25	18,155	2	3	91,314	10
Wyoming	20	29,121	34	25	54,660	64	1	529	1	2	724	1

Concentrated student poverty is attributable to dynamic factors, in response to longstanding conditions and public policies. These factors include patterns of urban and rural economic decline, residential suburbanization, municipal school district boundaries, and the vestiges of de jure racial segregation, and more recently, resegregation in the public schools.[9] While concentrated poverty is a predominant feature across the landscape of public education in the 50 states, the patterns and characteristics in each state vary.

---

[9] Gary Orfield and Chungmei Lee, *Racial Transformation and the Changing Nature of Segregation*, The Civil Rights Project, January 2006.

Existing School Funding Measures

Several reports have attempted to analyze state school funding systems. These are:

- The National Center for Education Statistics (NCES) publishes the most commonly used metric for state school funding: "state and local revenue per pupil," a decades-old measure frequently used to compare states with each other. This measure focuses on state and local revenue provided to local districts and schools, exclusive of federal revenue and without regard to current expenses and regional cost of living differences. Appendix B contains the most recent data on the NCES measure.

- *Education Week* publishes state school finance data and calculates the distribution of funding within states. In an advance over the NCES per-pupil revenue measure, *Ed Week* adjusts the student denominator in the calculation by using a "weighting," or an estimate of the extra cost of educating low-income students and students with disabilities.[10] The estimates also are adjusted to reflect regional wage variations. *Ed Week* also assigns a "grade" to each state using several measures. Appendix C gives the most recent *Ed Week* results.

- Education Trust, a Washington, D.C.-based advocacy group, periodically publishes a measure comparing state and local spending in school districts with the highest and lowest concentrations of low-income, minority, and English language learning students.[11] The measure accounts for regional wage variations, and adjusts for children in poverty, limited English proficiency, and children with disabilities.[12] Education Trust calculates "funding gaps" between higher- and lower-need school districts, and higher- and lower-minority school districts, within a given state. Appendix D gives these rankings from 2006, the last year the report was issued.

Limitations

These existing measures have serious shortcomings that include:

- The NCES per-pupil revenue measure masks differences in school funding within states, differences that can be as large as — or larger than — differences across states. This measure also does not account for differences in education costs within and across states and regions, and across labor markets, nor does it capture variations in student need and the variations in the resources needed to ensure that students with differing needs are able to meet common achievement and outcome standards, both within states and across states and regions. The NCES measure ignores the increased needs and costs of educating low-income students, especially those in concentrated poverty.

- While the *Ed Week* and Education Trust measures attempt to recognize differences in student need, particularly with regard to low-income students, they assign different and imprecise values — or "weights" — to account for those differences. In fact, one assigns a value nearly twice as large as the other, and neither is based on research on what it would actually take to close achievement gaps between poor and non-poor children.

---

[10] A "weighting" is an adjustment to per-pupil revenue or expenditure data designed to address differences in needs and costs. Some state school finance formulas use weightings to drive different amounts of funding to districts based on a variety of different needs. In the *Education Week* analysis, students in poverty are assigned a weight of 1.2 and students in special education a weight of 1.9.

[11] Carmen G. Arroyo, *The Funding Gap*, The Education Trust, January 2008.

[12] Education Trust assigns a weight of 1.4 to students in poverty, and 1.6 and 1.9 to limited English proficient students and students with disabilities, respectively. Funding Gap 2006. (http://www.edtrust.org/sites/edtrust.org/files/publications/files/FundingGap2006.pdf)

- Neither *Ed Week* nor Education Trust accounts for the large differences in state and local revenues that exist in very small, sparse rural districts versus larger urban and suburban districts.

- The imprecise methods used by *Ed Week* and Education Trust lead to strikingly different and inconsistent rankings between the two measures.

6

Is School Funding Fair? A National Report Card

A Better Measure: Analyzing School Funding Fairness

Building a more accurate, reliable and consistent method of analyzing how states fund public education starts with a critical question: What is fair school funding? ***In this report, "fair" school funding is defined as a state finance system that ensures equal educational opportunity by providing a sufficient level of funding distributed to districts within the state to account for additional needs generated by student poverty.***

This report presents a National Report Card on Fair School Funding that measures the fairness of the school finance systems in all 50 states, as defined above. The central purpose of the Report Card is to evaluate the extent to which state systems ensure equality of educational opportunity for all children, regardless of background, family income, where they live, or where they attend school. As noted, equal educational opportunity means that all children (and the public schools that serve them) have access to those resources, inputs, and services necessary to provide the "opportunity to learn" — that is, the opportunity to achieve established outcome goals.

The Fairness Principles

The Report Card is built on the following core principles:

- Varying levels of funding are required to provide equal educational opportunities to children with different needs.

- The costs of education vary based on geographic location and other factors, particularly regional differences in teacher salaries, school district size, population density, and various student characteristics. It is critical to account for as many of these variables as possible, given the availability of reliable data.

- The level of funding should increase relative to the level of concentrated student poverty. That is, state finance systems should provide more funding to districts serving larger shares of students in poverty. Economists often evaluate systems as "progressive" or "regressive." As used in this report, a "progressive" finance system allocates more funding to districts with high levels of student poverty; a "regressive" system allocates less to those districts; and a "flat" system allocates roughly the same across districts with varying needs.

- Student poverty — especially concentrated student poverty — is the most critical variable affecting funding levels. Student and school poverty correlates with, and is a proxy for, a multitude of factors that impact upon the costs of providing equal education opportunity — most notably, gaps in educational achievement, school district racial composition, English-language proficiency, and student mobility. State finance systems should deliver greater levels of funding to higher-poverty versus lower-poverty settings, while controlling for differences in other cost factors.[13]

- While the distribution of funding to account for student poverty is crucial, the overall level of funding still matters — greatly. The state finance system should allocate sufficient funding to ensure equal education opportunity to all students. If the overall level of funding generated by the state system is woefully inadequate, it is of little consolation that students in high-poverty districts receive more resources than those in lower-poverty districts.

---

[13] Current data do not permit inclusion of measures for additional student characteristics, particularly students with disabilities and limited English proficiency, without compromising the relationship between school funding and poverty, the main focus of this report. For more information see the "Research Method" section of this report.

- The sufficiency of the overall funding level in any given state can be assessed based on comparisons with other states, particularly those in the same region with similar conditions and characteristics. Using available national data, average differences in state and local revenues between states, as well as within states, can be projected and indexed to compare expected state and local revenues per pupil for districts of similar characteristics. An "expected" value for state and local revenues is a "predicted" value based on a statistical model of school district characteristics. These "expected values" allow for more direct comparisons of districts having similar characteristics across states.

Why Measure Fairness?

Based on these core principles, the data and measures presented in the National Report Card focus on the central question concerning the 50 state school finance systems: Do they support equal educational opportunity for all students and, in particular, for low-income students in school districts with concentrated poverty? Put simply, do the states provide fair school funding?

Understanding the fairness of the 50 state finance systems is crucial to the national effort to ensure access to high-quality education and to close opportunity and achievement gaps among subgroups of students, particularly low-income students. It is also a prerequisite to the federal, state, and local efforts to improve "underperforming" schools and schools serving urban and rural communities.[14] Policymakers, educators, business leaders, parents — and the public at large — urgently need better and more reliable information to understand the fairness of our existing finance systems, identify problems with those systems, and devise and implement policy solutions to advance school funding fairness.

The Fairness Measures

The Report Card consists of four separate but interrelated fairness measures. States are evaluated on each of these measures. The four measures are:

- **Funding Level:** This measures the overall level of state and local revenue provided to school districts, and compares each state's average per-pupil revenue with that of other states, including states within the region. To recognize the variety of interstate differences, each state's revenue level is adjusted to reflect differences in regional wages, poverty, economies of scale, and population density.

- **Funding Distribution:** This measures the distribution of funding across local districts within a state, relative to student poverty. The measure shows whether a state provides more or less funding to schools based on their poverty concentration, using simulations ranging from 0% to 30% child poverty.

- **Effort:** This measures differences in state spending for education relative to state fiscal capacity. "Effort" is defined as the ratio of state spending to state per-capita gross domestic product (GDP).

---

[14] Also of concern is the extent to which disparities exist across schools within districts. Sufficient data for evaluating funding differences at the school level are not available nationally, but are available in some states. However, research underscores the fact that funding disparities between districts resulting from the state finance systems are a major impediment to fair funding for all schools within districts. See Baker, B.D., Welner, K. (2010), "Premature Celebrations: The persistence of inter-district spending disparities." *Education Policy Analysis Archives* 18 (9).

8

Is School Funding Fair? A National Report Card

- ***Coverage:*** This measures the proportion of school-age children attending the state's public schools, as compared with those not attending the state's public schools (primarily parochial and private schools, but also home schooling). The share of the state's students in public schools, and the median household income of those students, is an important indicator of the distribution of funding relative to student poverty (especially where more affluent households simply opt out of public schooling), and the overall effort to provide fair school funding.

It is important to note that not all of these fairness measures are entirely within the control of state policymakers. For example, the level of funding is a function of both the state's effort and wealth. When evaluating a state's funding level, it is important to consider whether the funding level is a function of effort, wealth (that is, fiscal capacity), or a combination of the two. In addition, the extent to which children attend public schools is not entirely a function of the quality of the public system. Some states historically have a larger supply of private schools and higher degree of private-school attendance. However, numerous empirical studies do validate that the quality of a state's public education system can influence coverage.[15]

Research Method

The fairness measures use a combination of simple descriptive and more complex statistical modeling methods. Effort and Coverage are straightforward descriptive measures. State-level indicators are calculated from available descriptive data, allowing states to be graded and ranked from most to least fair.

Funding Level and Funding Distribution require more advanced statistical techniques. The purpose of these measures is to compare school funding both across and within states. Because education costs vary based on a number of factors — for example, regional differences in teacher salaries, school district size, population density, and various student characteristics — a research method is needed that 1) simulates comparable conditions, or holds variables constant, across states to ensure a fair comparison, and 2) characterizes the relationship between revenue (funding) and poverty within states, while controlling for variations in other cost-affecting conditions.

A regression analysis achieves these goals by predicting an outcome — in this case, school funding levels — based on relevant variables such as student poverty, regional wage variation, and school district size and density. The regression model provides an estimate that quantifies the relationship between the outcome and each variable in the model. The model also allows for an examination of pertinent issues, such as changes in spending in relation to student poverty, or changes in relation to school district size. It is important to note, however, that additional measures of student characteristics, such as disability rates and limited English proficiency, are not included in the statistical model. The current measures of these characteristics are weak and irregular across states, and they complicate the interpretation of the poverty effect within states, a critical focus of the model.[16]

Funding Level: The regression model predicts an average per-pupil funding level for each state, while holding all other factors constant. The model eliminates the variation in funding associated with characteristics that vary between districts and across states, and determines average funding at the state level under a hypothetical, yet meaningful, set of conditions. The model simulates

---

[15] See, for example, Thomas Downes & David Schoeman (1998), School Finance Reform and Private School Enrollment: Evidence from California. *Journal of Public Economics*, 43 (3) 418 – 443.

[16] It is also important to note that this regression model is only able to compare expenditure differences across similar settings, and cannot fully control for the "costs" of achieving "comparable outcomes." A true education cost model requires a common outcome measure across all settings in the model, and such outcome measures are not currently available for all school districts nationally.

average revenue levels for each state by assigning the national averages for each of the variables in the model. This yields a determination of spending differences among states, and removes the expected variation resulting from differences in labor costs, district size, student characteristics, etc.

It is important to note that the state averages, while calculated from actual revenue levels, are predictions based on a hypothetical set of conditions necessary to make meaningful comparisons among states; therefore, they will vary from the average spending levels reported in the NCES measure.

Funding Distribution: The same regression model is used for predicting the distribution of funding within each state, relative to poverty. Essentially, the model is used to estimate the relationship between student poverty and school funding for each state. Funding levels are predicted at three levels of poverty — 0%, 10%, and 30% — under the average conditions within each state. The model estimates, on average, whether funding levels increase or decrease as district poverty increases.

A separate technical report is available for more detail on the statistical analyses used in this report.

Research Framework

The key elements of the research used to construct the fairness measures are:

- Districts as the unit of analysis: This level of data is used because a) districts are the primary organizational units charged with managing and operating schools; b) districts are the locus of the most significant disparities in school funding; c) students remain highly sorted and segregated between districts, more so than within districts; and d) many states allow districts to retain a significant degree of fiscal independence to raise revenues via local property taxes. This district focus also sheds light on claims that funding differences and disparities are caused primarily by district misallocation among schools within districts, rather than the overall level and distribution of state and local revenues authorized by states through their respective finance systems.

- State and local revenue: This data, rather than current operating expenditures, allows for a more precise focus on the state's school finance policy, reliance on local property taxes, and the distribution of state aid to local districts. Current operating expenditures include other revenue sources, such as federal funding. The only federal source funds included are those intended by federal policy to offset lost state or local revenue — in other words, federal impact aid and Indian schools aid, both of which are relatively small for most states.

- Funding distribution relative to poverty: This data allows for an in-depth examination of the relationship between funding generated by the state finance systems and student poverty. Using census data on children in poverty ages 5 to 17 residing in local districts allows for an analysis of the extent to which higher-poverty districts have systematically more or less state and local revenue per pupil than lower-poverty districts. No assumptions are made about how much additional funding should be provided to students in poverty. Rather, the fairness measures calculate the relationship between funding and poverty to ascertain whether the state finance system results in a more fair ("progressive"), less fair ("regressive"), or flat pattern of funding distribution among districts within the state.

- Cost variation: This data not only accounts for regional variation in competitive wages using the NCES Comparable Wage Index, but also compensates for differences in economies of scale and population density.

- Longitudinal data: The fairness measures use three years of the most recent available data, from 2005 to 2007. This approach limits the effect of occasional capital projects, one-time revenue bumps, and other kinds of funding aberrations, thereby "smoothing out" the final results. However, this measure does not capture more recent developments in the states, such as improvements in finance systems and state school aid cutbacks from the national fiscal downturn.

Is School Funding Fair? A National Report Card

11

II. The Four Fairness Measures

Evaluating the States

Each state is evaluated on all four fairness measures. The evaluations are comparative in nature, analyzing how an individual state compares with other states in the nation and region. States are **not** evaluated using specific thresholds of education cost and school funding that might be considered "adequate" or "equitable" if applied nationally or regionally. This type of evaluation would require positing hard definitions of education cost and student need based on the complex conditions in each state. Such an exercise is beyond the scope of this report.[17]

States are evaluated by two methods — a grading curve and rank. Funding Distribution and Effort, the two measures over which states have direct control, are given letter grades that are based on a typical grading "curve" and range from A to F. A standardized score (z-score) is calculated as the state's difference from the mean on the indicator of interest, expressed in standard deviations. The standardized scores are then collapsed into grades.[18]

On the Funding Level and Coverage measures, the states are ranked, not graded, because these measures are influenced not only by state policy, but other historic and contextual factors. States are ranked from highest to lowest based on their Funding Level. The Coverage measure is ranked using two factors: the proportion of students educated in the public system, with greater percentages ranked higher; and the private/public income ratio, with small ratios receiving a higher ranking. Standardized scores for these two elements are averaged to create a final score upon which states are ranked.

It is important to note that, because the evaluations are comparative, when a state receives a high grade or rank on an indicator, it does not mean that its funding system is perfect or without room for improvement. Rather, it simply means that the state is doing better than other states in the nation. Even those states positioned at the top can do more to make their funding systems more fair.

Fairness Measure #1: Funding Level

The first fairness measure is the overall level of per-pupil funding for each state, as compared with the 50 states. As noted, several major factors influence the level of state and local revenue — or funding — generated by the state finance systems. These are: 1) student poverty, 2) regional wage variation, 3) economies of scale, 4) population density, and 5) the interplay between population density and economies of scale. The factors are illustrated in Figure 1. This model includes key elements that, when put together, yield an understanding of how the above factors influence state and local education revenues nationally. The model, in turn, estimates the impact of these factors on the revenues produced by individual state finance systems.

---

[17] As previously noted, the United States has no established outcome measures for the 50 states. In addition, no national uniform program or input standards have been adopted that would allow for measuring the "cost" of providing equal educational opportunities across all states. Thus, it is not feasible at present to compare current funding levels with a research-based measure of the cost of educating all students in U.S. public schools to achieve accepted national outcomes.

[18] Grades are as follows: A = 2/3 standard deviation above the mean (z > 1.67); B = between 1/3 and 2/3 standard deviations above the mean (1.33 < z < 1.67); C = between 1/3 standard deviation below and 1/3 standard deviation above the mean (-1.33 < z < 1.33); D = between 1/3 and 2/3 standard deviations below the mean (-1.33 > z > -1.67); F = 2/3 standard deviation below the mean (z < -1.67). In some cases, the tables show states that have the same numerical score but different letter grades because their unrounded scores place them on opposite sides of the grading cutoffs.

12

Is School Funding Fair? A National Report Card

Figure 1: Factors Influencing State and Local Education Costs
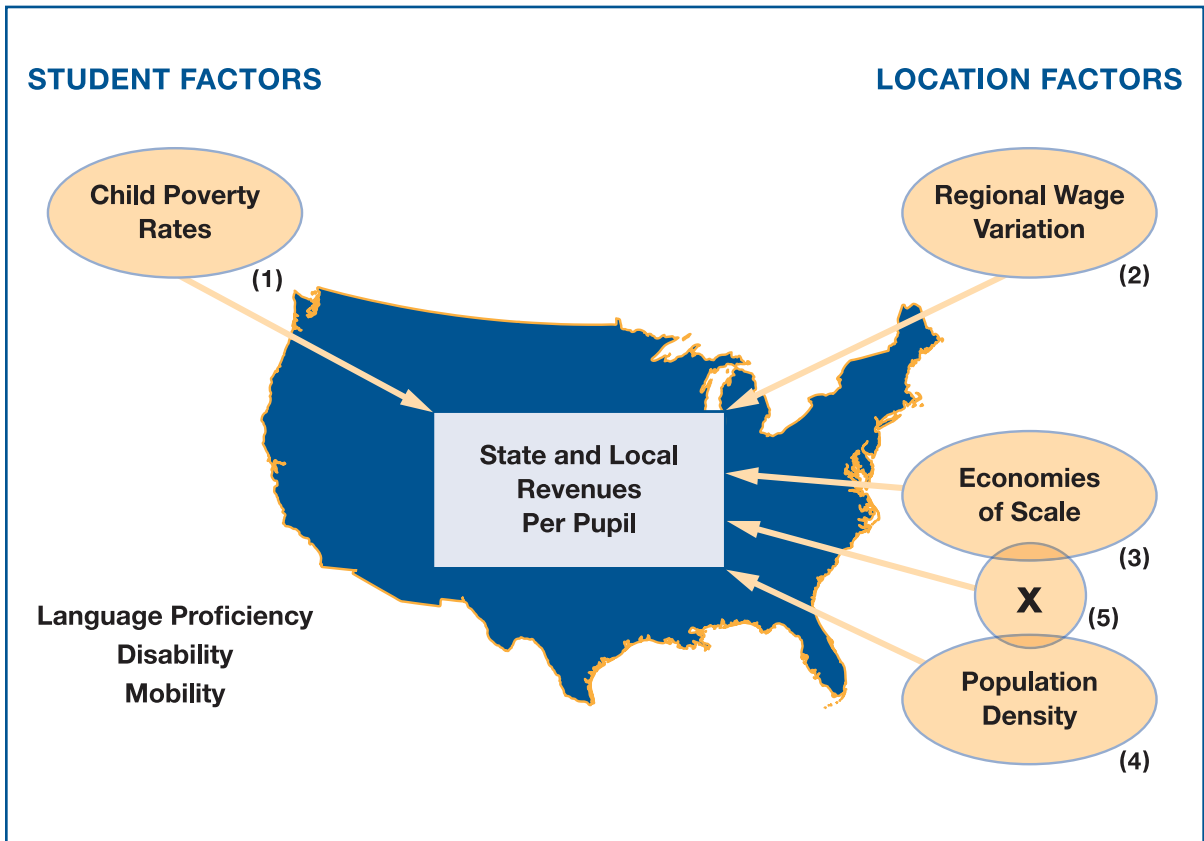
To measure the funding level, state and local education revenues are adjusted to the national average poverty level — about 16%. The revenues also are adjusted for differences in the other factors — regional wage variation, economies of scale, and population density.[19] This adjusted per-pupil funding level puts all states onto a more equal footing by controlling for a variety of factors outside state control.

Table 2 shows the mean actual state and local revenues per pupil for each state, the same per-pupil revenues predicted using the adjustments described above, and the difference between the two amounts. Each state also is ranked for the fairness of the per-pupil funding level, using the predicted per-pupil amount to rank states with higher spending levels as more fair than states with low per-pupil revenues.

---

[19] Other modeling options were considered, particularly allowing the effect of the various "cost" factors to be estimated for each state individually. These resulted in adding a level of complexity to the model without significantly changing the results. We attempted to control for the grade range configuration of districts (i.e., unified, elementary, and secondary) but this also did not substantively change the results.

Is School Funding Fair? A National Report Card

13

Table 2: Fairness Measure #1: Funding Level

State	Mean Actual State and Local Revenue per Pupil	Predicted State & Local Revenue	% Difference	Rank
Wyoming	$16,238	$16,947	4%	1
New Jersey	$17,115	$16,101	-6%	2
District of Columbia	$17,823	$15,594	-13%	3
Vermont	$17,552	$15,557	-11%	4
New York	$17,247	$15,320	-11%	5
Alaska	$12,504	$14,764	18%	6
Hawaii	$15,362	$14,351	-7%	7
Connecticut	$15,132	$14,126	-7%	8
Massachusetts	$14,355	$13,338	-7%	9
Delaware	$13,572	$12,745	-6%	10
Rhode Island	$13,114	$12,260	-7%	11
Pennsylvania	$12,282	$11,623	-5%	12
Maryland	$12,948	$11,592	-10%	13
Maine	$11,903	$11,522	-3%	14
Minnesota	$10,893	$11,151	2%	15
Wisconsin	$10,999	$10,573	-4%	16
Ohio	$10,933	$10,435	-5%	17
New Hampshire	$12,351	$10,346	-16%	18
U.S.	*$10,469*	*$10,132*	*-3%*	
Iowa	$9,879	$9,954	1%	19
Kansas	$10,040	$9,861	-2%	20
Virginia	$10,854	$9,815	-10%	21
Florida	$9,947	$9,691	-3%	22
Michigan	$10,200	$9,678	-5%	23
Georgia	$9,969	$9,671	-3%	24
Nebraska	$9,881	$9,563	-3%	25
West Virginia	$9,072	$9,368	3%	26
Indiana	$9,271	$9,274	0%	27
South Carolina	$9,155	$9,162	0%	28
Illinois	$10,179	$9,120	-10%	29
Louisiana	$8,806	$9,085	3%	30

14

Is School Funding Fair? A National Report Card

State	Mean Actual State and Local Revenue per Pupil	Predicted State & Local Revenue	% Difference	Rank
California	$9,774	$9,030	-8%	31
Washington	$9,366	$8,906	-5%	32
Alabama	$8,591	$8,901	4%	33
New Mexico	$8,890	$8,898	0%	34
Colorado	$9,012	$8,727	-3%	35
Kentucky	$8,585	$8,685	1%	36
Oregon	$8,525	$8,565	0%	37
Montana	$9,158	$8,547	-7%	38
Nevada	$8,829	$8,475	-4%	39
North Dakota	$9,063	$8,457	-7%	40
South Dakota	$8,347	$8,445	1%	41
Texas	$8,813	$8,427	-4%	42
Missouri	$8,689	$8,390	-3%	43
North Carolina	$8,401	$8,320	-1%	44
Arkansas	$8,158	$8,292	2%	45
Arizona	$8,091	$7,969	-2%	46
Mississippi	$7,102	$7,444	5%	47
Utah	$6,586	$7,098	8%	48
Idaho	$6,898	$6,990	1%	49
Oklahoma	$7,053	$6,903	-2%	50
Tennessee	$6,966	$6,839	-2%	51

The national average funding level, as adjusted, is $10,132 per pupil (in 2006 – 2007), with 18 states above and 32 below the average. The state with the highest funding level — Wyoming, at $16,947 per pupil — provides about two-and-a-half times the funding provided by the state with the lowest funding (Tennessee, at $6,839). Even after adjusting for regional wage variation and population density, low-funding states predominate in the South and West regions, while the highest-funding states are in the Northeast and Midwest. The difference between the actual and mean per-pupil amounts is substantial for a number of states. For example, Virginia appears to have above-average funding levels when considering the mean per-pupil revenue across the state, but when the per-pupil amounts are adjusted to reflect funding under nationally comparable conditions, Virginia's funding levels are below average.[20]

[20] Washington, D.C.'s high funding level may be partially explained by the large proportion of special education students in the district, a factor we were unable to control for in the regression model.

Fairness Measure #2: Funding Distribution

The second fairness measure examines the distribution of funding to districts within states, relative to student poverty. As noted, this measure addresses a key question: to what extent are existing state funding systems or formulas sensitive to changes in the rate of student poverty?

Table 3 shows the results for each state. Hawaii and the District of Columbia are not included because each has only one school district.[21] The first column shows the mean per-pupil amount of actual state and local revenue. Per-pupil funding amounts for districts within the state are then given across the poverty slope, simulated at 0%, 10%, 20%, and 30%. The variation of the within-state funding distribution is then shown as a percentage between the highest poverty simulation and the lowest. A state with a high ratio between high- and low-poverty districts is a progressively funded state — in other words, poor districts get more funding than wealthy districts. A state with a low ratio is a regressively funded state — in other words, poor districts receive less funding than wealthy districts.

Table 3: Fairness Measure #2: Funding Distribution

State	Mean Actual State and Local Revenue per Pupil	At 0% Poverty	At 10% Poverty	At 20% Poverty	At 30% Poverty	High/ Low	Grade
Utah	$6,586	$5,700	$6,539	$7,503	$8,608	151%	A
New Jersey	$17,115	$13,464	$15,060	$16,845	$18,841	140%	A
Minnesota	$10,893	$9,391	$10,458	$11,646	$12,968	138%	A
Ohio	$10,933	$9,054	$9,896	$10,816	$11,821	131%	A
South Dakota	$8,347	$7,467	$8,066	$8,712	$9,410	126%	B
Massachusetts	$14,355	$12,146	$12,880	$13,658	$14,483	119%	B
Montana	$9,158	$7,848	$8,279	$8,733	$9,213	117%	B
Indiana	$9,271	$8,534	$8,991	$9,471	$9,978	117%	C
New Mexico	$8,890	$8,286	$8,664	$9,060	$9,474	114%	C
Connecticut	$15,132	$13,181	$13,765	$14,375	$15,013	114%	C
Tennessee	$6,966	$6,429	$6,683	$6,946	$7,220	112%	C
Oregon	$8,525	$8,175	$8,417	$8,666	$8,922	109%	C
Wyoming	$16,238	$16,254	$16,684	$17,126	$17,580	108%*	C
Oklahoma	$7,053	$6,665	$6,813	$6,964	$7,118	107%	C
Iowa	$9,879	$9,723	$9,867	$10,014	$10,163	105%	C
Arizona	$8,091	$7,801	$7,906	$8,012	$8,120	104%	C
Arkansas	$8,158	$8,136	$8,233	$8,332	$8,432	104%	C
Kentucky	$8,585	$8,531	$8,627	$8,724	$8,823	103%	C
California	$9,774	$8,879	$8,974	$9,069	$9,166	103%	C
Georgia	$9,969	$9,544	$9,623	$9,703	$9,784	103%	C
South Carolina	$9,155	$9,057	$9,122	$9,188	$9,255	102%	C
Rhode Island	$13,114	$12,159	$12,222	$12,285	$12,349	102%	C

* Relationship not statistically significant.

---

[21] Alaska is excluded from the within-state distribution analysis because the unique geography and sparse population of the state, being so highly correlated with poverty levels, result in inconsistent estimates of within-state resource distribution in our models. As such, it is extremely difficult to compare Alaska with the other states in the nation.
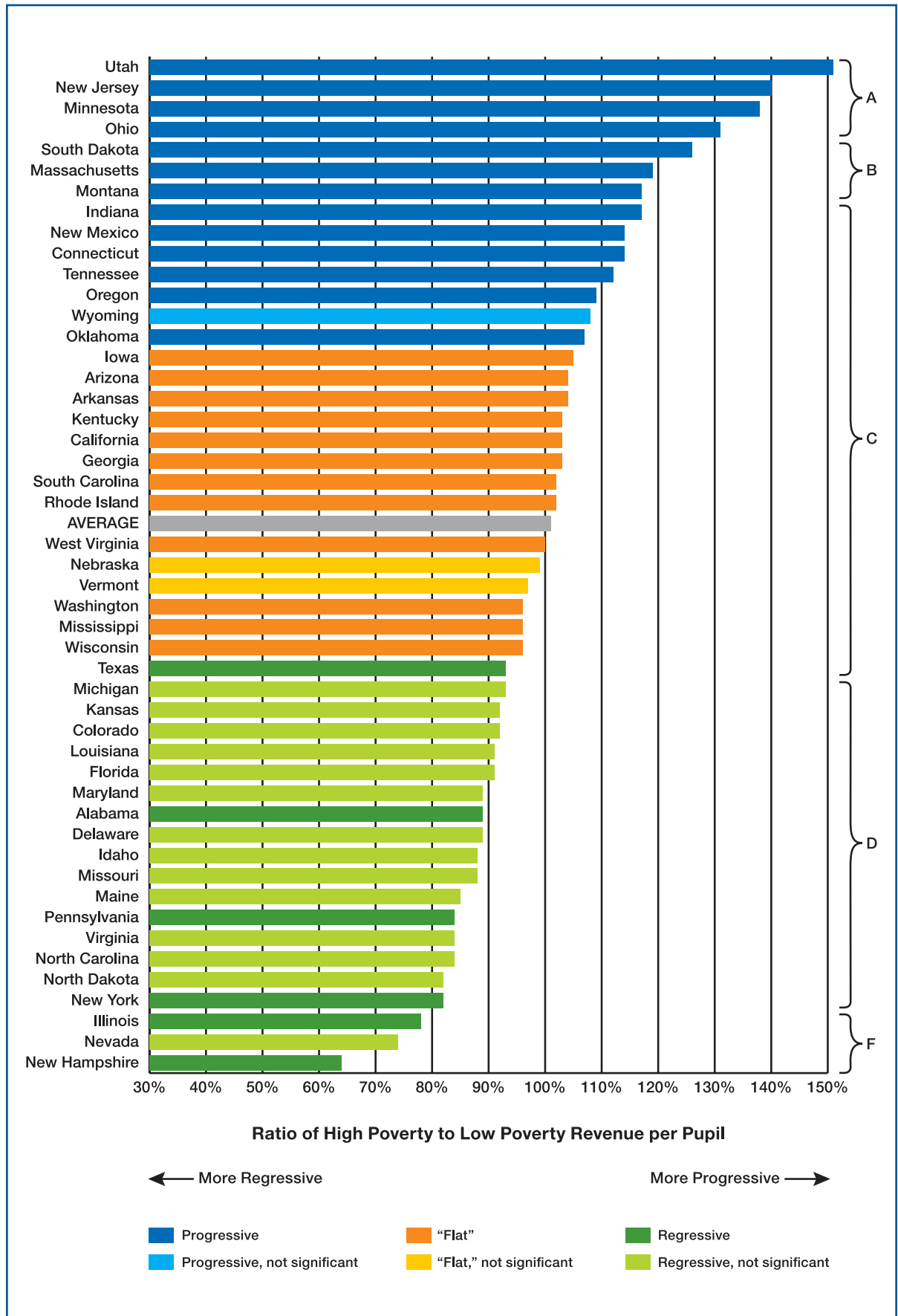
16

Is School Funding Fair? A National Report Card

Table 3: Fairness Measure #2: Funding Distribution (continued)

State	Mean Actual State and Local Revenue per Pupil	At 0% Poverty	At 10% Poverty	At 20% Poverty	At 30% Poverty	High/ Low	Grade
U.S.		*$10,153*	*$10,127*	*$10,144*	*$10,207*	*101%*	*C*
West Virginia	$9,072	$9,349	$9,361	$9,373	$9,385	100%	C
Nebraska	$9,881	$9,633	$9,589	$9,545	$9,501	99%*	C
Vermont	$17,552	$15,802	$15,648	$15,495	$15,344	97%*	C
Washington	$9,366	$9,076	$8,969	$8,863	$8,758	96%	C
Mississippi	$7,102	$7,608	$7,505	$7,403	$7,303	96%	C
Wisconsin	$10,999	$10,813	$10,662	$10,513	$10,367	96%	C
Texas	$8,813	$8,738	$8,542	$8,350	$8,163	93%	C
Michigan	$10,200	$10,077	$9,825	$9,580	$9,341	93%*	D
Kansas	$10,040	$10,300	$10,023	$9,754	$9,492	92%*	D
Colorado	$9,012	$9,149	$8,882	$8,623	$8,372	92%*	D
Louisiana	$8,806	$9,558	$9,259	$8,970	$8,689	91%*	D
Florida	$9,947	$10,216	$9,884	$9,562	$9,251	91%*	D
Maryland	$12,948	$12,313	$11,856	$11,417	$10,993	89%*	D
Alabama	$8,591	$9,465	$9,107	$8,764	$8,433	89%	D
Delaware	$13,572	$13,564	$13,045	$12,546	$12,065	89%*	D
Idaho	$6,898	$7,471	$7,166	$6,873	$6,593	88%*	D
Missouri	$8,689	$8,994	$8,611	$8,244	$7,893	88%*	D
Maine	$11,903	$12,532	$11,889	$11,279	$10,701	85%*	D
Pennsylvania	$12,282	$12,715	$12,020	$11,362	$10,741	84%	D
Virginia	$10,854	$10,758	$10,157	$9,590	$9,054	84%*	D
North Carolina	$8,401	$9,134	$8,615	$8,126	$7,664	84%*	D
North Dakota	$9,063	$9,370	$8,788	$8,241	$7,728	82%*	D
New York	$17,247	$17,012	$15,931	$14,920	$13,972	82%	D
Illinois	$10,179	$10,430	$9,589	$8,816	$8,105	78%	F
Nevada	$8,829	$9,916	$8,988	$8,146	$7,383	74%*	F
New Hampshire	$12,351	$13,113	$11,304	$9,745	$8,401	64%	F

* Relationship not statistically significant.

State funding distribution patterns relative to student poverty also are shown in Figure 2. The blue bars show states where a district with 30% student poverty is expected to receive more than 5% **more** state and local revenue per pupil than a district with 0% poverty. These states distribute funding in a "progressive" pattern, and rank high on funding fairness. The green shaded bars are states where a district with 30% poverty is expected to receive more than 5% **less** than a district with 0% poverty. These states distribute funding in a "regressive" pattern, and rank low on fairness. Orange bars indicate states where there is no predicted increase or decrease in spending in relation to poverty, though this may be because all districts are funding at similar levels, or because there is variation in spending, but that variation is not related to poverty. The yellow, light blue and light green bars represent states where there is a nonsystematic, or statistically insignificant, relationship. Though the high-poverty districts are predicted to get more (light blue) or less (light green) than districts with 0% poverty, there is too much variation among individual school districts to suggest a definitive pattern.

17

Is School Funding Fair? A National Report Card

Figure 2: State Funding Distribution

Ratio of High Poverty to Low Poverty Revenue per Pupil

← More Regressive   More Progressive →

■ Progressive   ■ "Flat"   ■ Regressive
■ Progressive, not significant   ■ "Flat," not significant   ■ Regressive, not significant

On Funding Distribution, some of the key findings are:

- Only 14 states have progressive funding systems, providing greater funding to high-poverty districts than to low-poverty districts. The most progressive funding systems are in Utah, New Jersey, and Minnesota.

- 20 states have regressive funding systems, providing high-poverty districts with less state and local revenue than low-poverty districts, though the pattern is nonsystematic in 14 of those states. New Hampshire, Illinois, New York, Pennsylvania, Alabama, and Texas show clearly regressive funding patterns. Since 2006 – 2007, New York and Pennsylvania have begun implementing changes to their school finance systems, and this may tilt these states towards a more progressive funding distribution. Illinois and New Hampshire, however, have not made any changes.

- 14 states have "flat" systems, with no appreciable difference in funding to low- and high-poverty districts.

- Progressive, regressive, and flat funding states are located in every region.

The State Fairness Profiles

The Funding Distribution measure also can be illustrated by a "state fairness profile." The fairness profiles of three hypothetical states are displayed in Figure 3. State A is a "flat" state, distributing very low revenue at the same level to districts regardless of poverty. State B and State C share a common intercept: predicted state and local revenue for a district with 0% poverty, which represents the implicit base funding per pupil for these states. But State B has an overall downward or "regressive" funding distribution slope, while State C has an upward or "progressive" distribution slope, resulting in markedly differing funding levels for high-poverty districts in each state.

Figure 3: State Fairness Profiles

Fairness profile

State C (Avg. implicit base rev., progressive)

State B (Avg. implicit base rev., highly regressive)

State A (Low revenue, poverty "flat")

State & Local Revenue per Pupil

Low Poverty   High Poverty
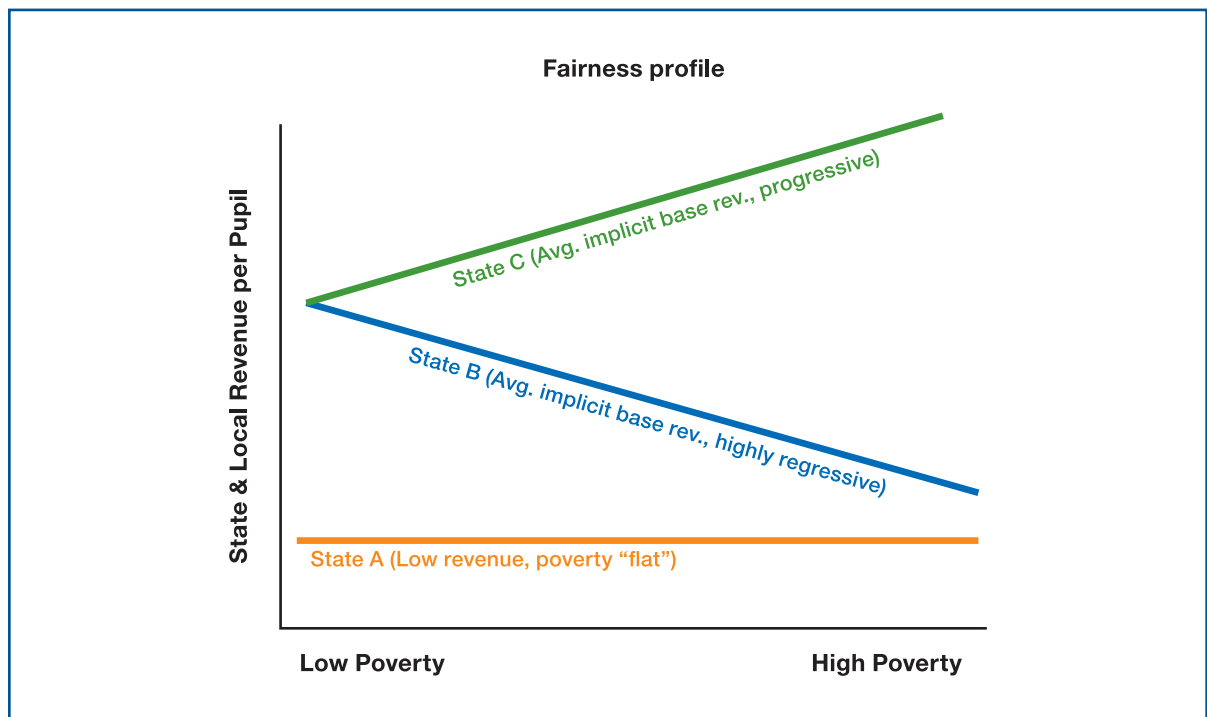
The funding distribution pattern — progressive, regressive, or flat — within each state also is shown in the state fairness profile, as displayed in Figure 3. The fairness profile for each state is presented below, grouped by regions.[22] These regional groupings allow for a more accurate comparison of states that have similar characteristics, such as poverty rates and variations in cost.

To find a fairness profile for a specific state, locate the region in which the state is grouped. The state's profile is clearly marked, alongside the other states in the region.

Figure 4: Mid-Atlantic: Delaware, Maryland, New Jersey, New York

---

22 The regional groupings are borrowed from Nate Silver's electoral analysis. These categories group states based not only on geography, but also in terms of other social and economic characteristics. (http://www.fivethirtyeight.com)

Figure 5: Big Sky: Idaho, Montana, Utah, Wyoming
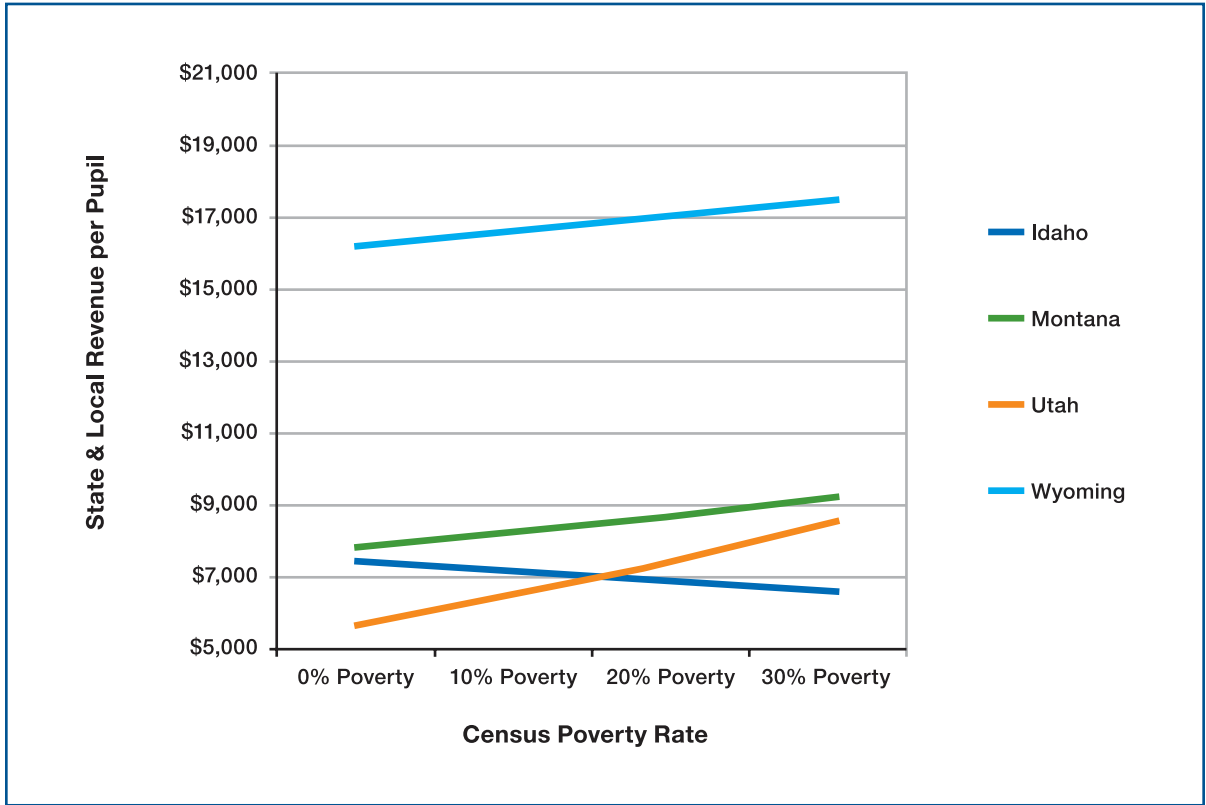
Figure 6: Gulf Coast: Alabama, Louisiana, Mississippi, Texas

21

Is School Funding Fair? A National Report Card
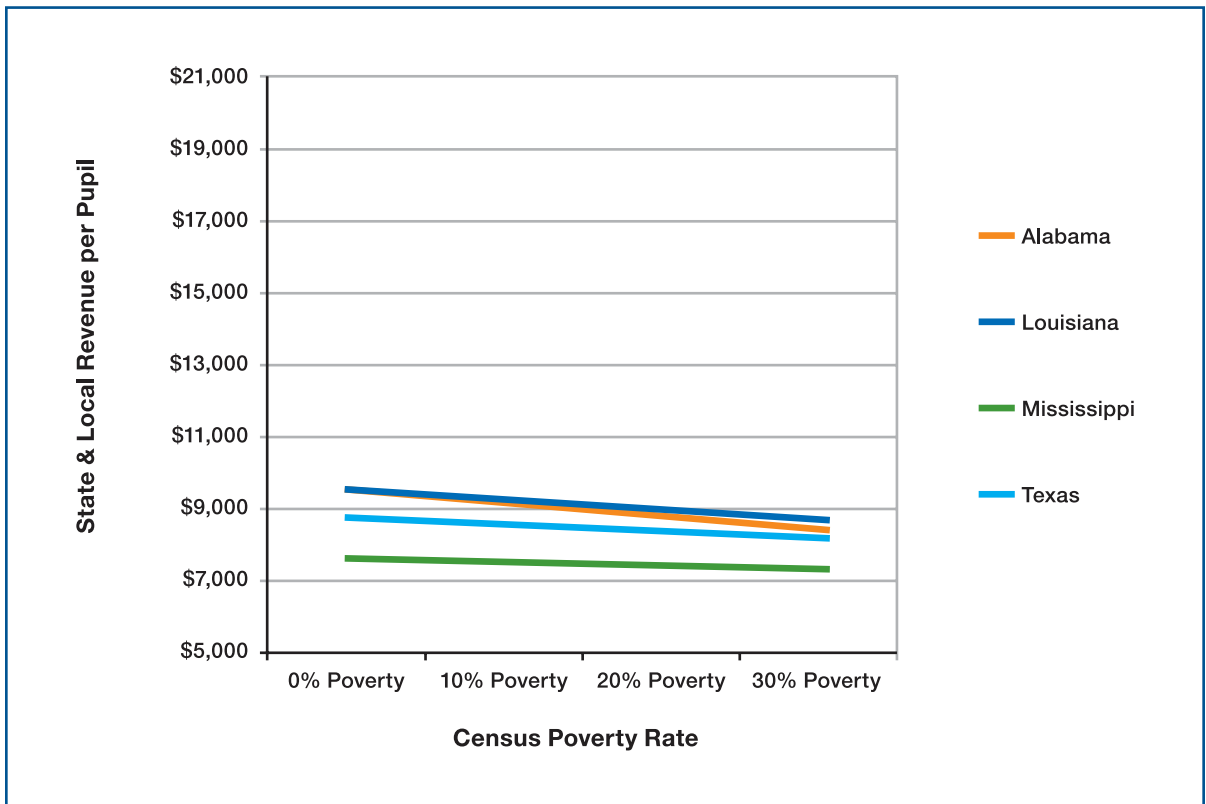
Figure 7: Southeast: Arkansas, Kentucky, Missouri, Oklahoma, Tennessee, West Virginia
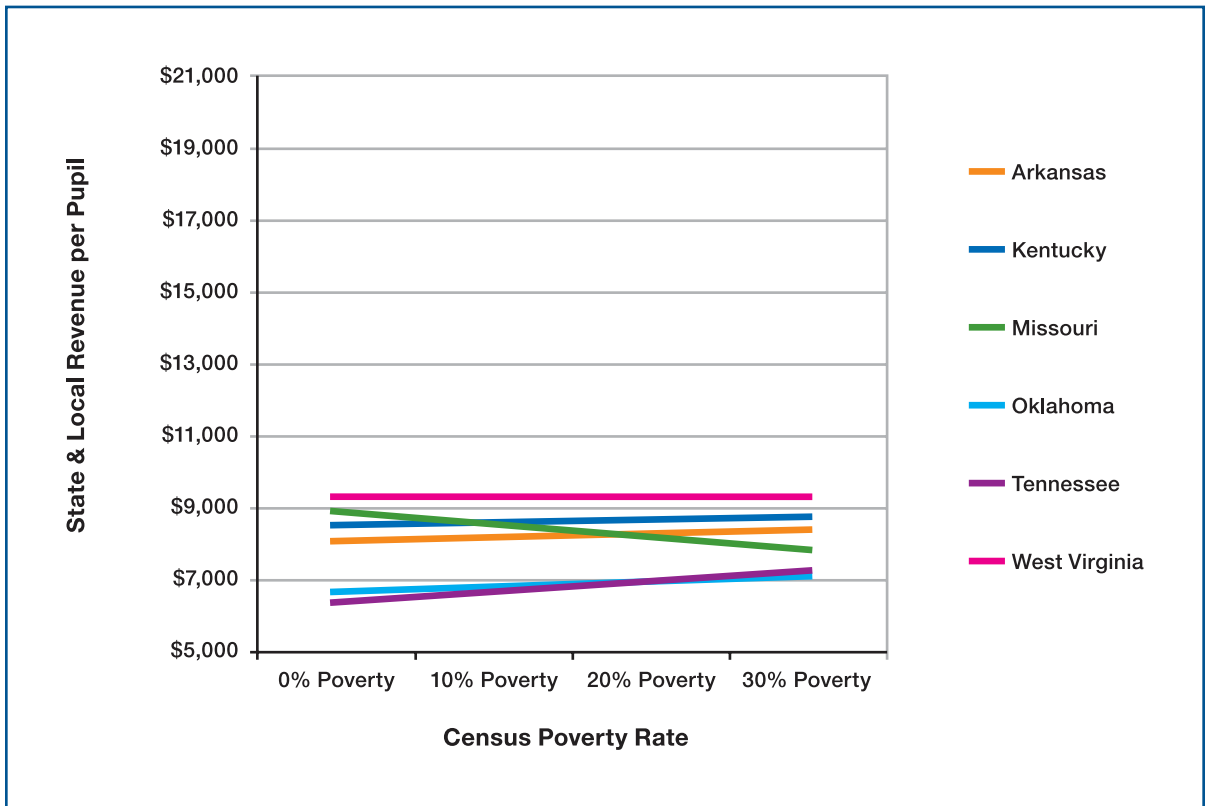
Figure 8: New England: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont
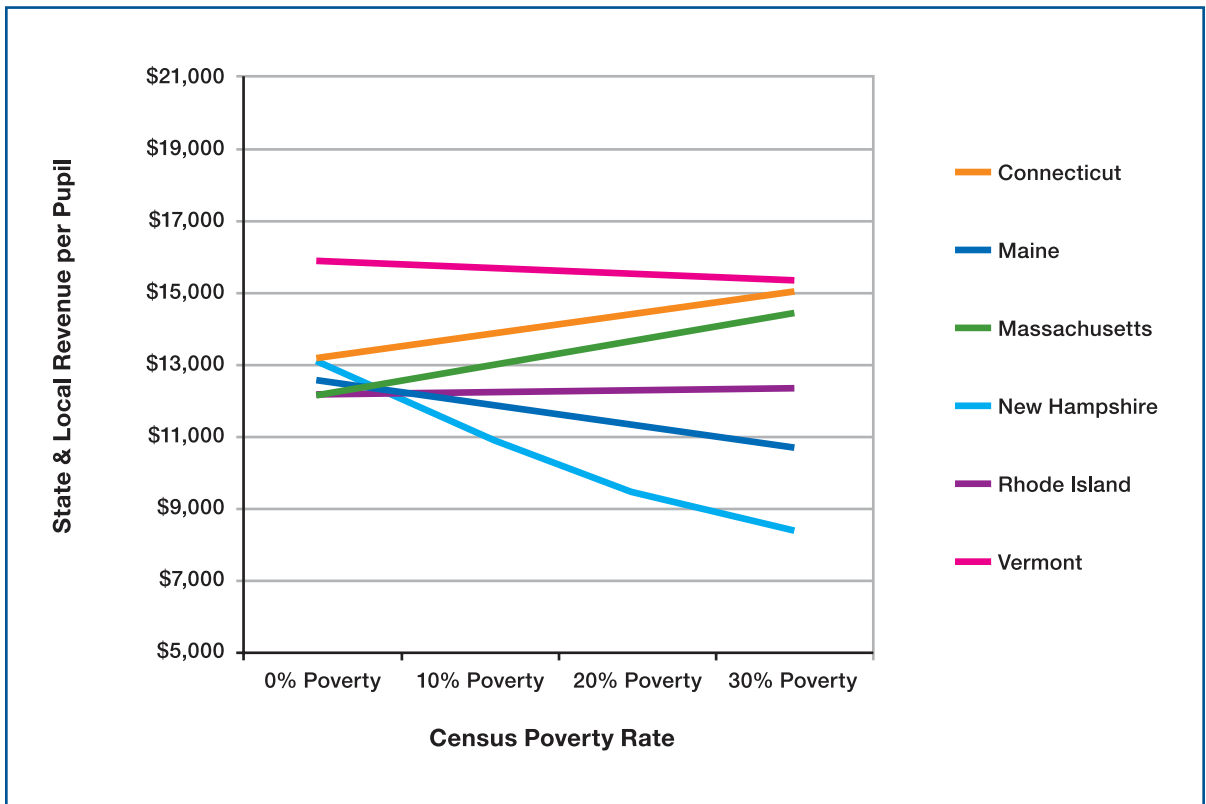
Figure 9: North Central: Illinois, Iowa, Minnesota, Wisconsin
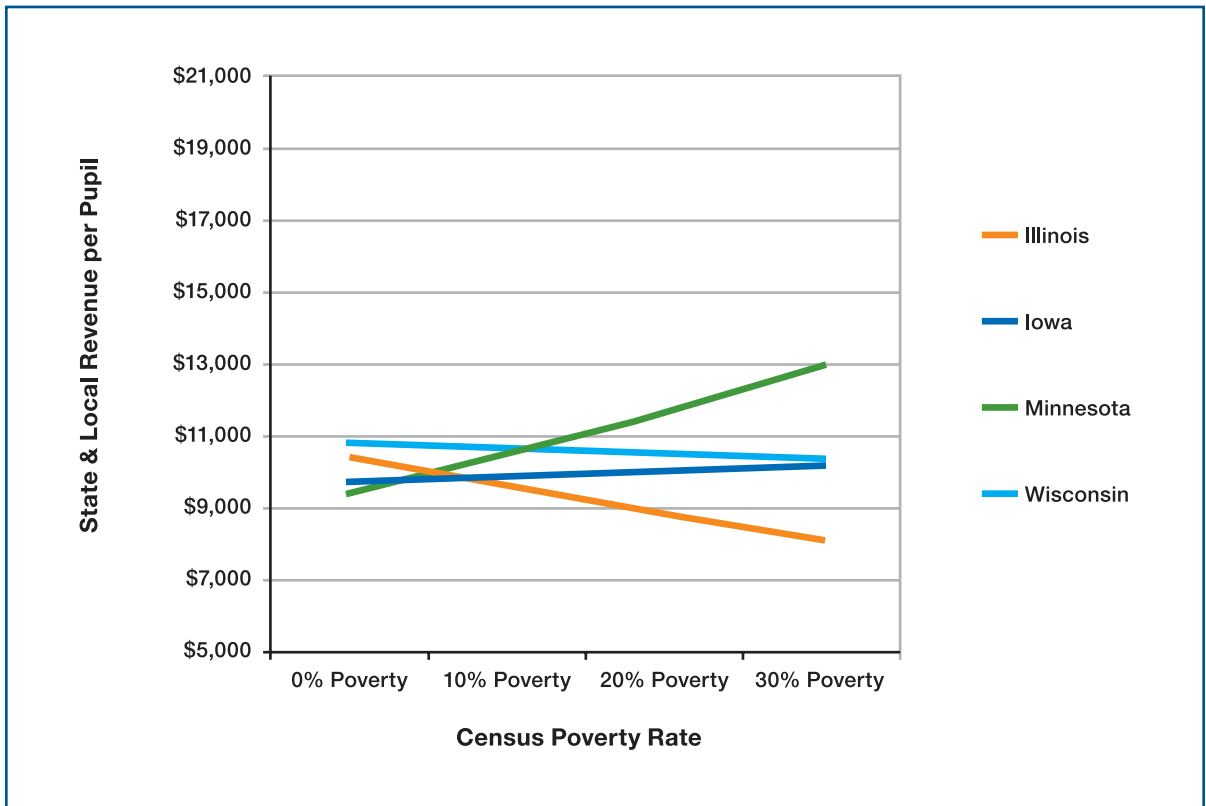
Figure 10: Pacific: California, Oregon, Washington

Is School Funding Fair? A National Report Card

23
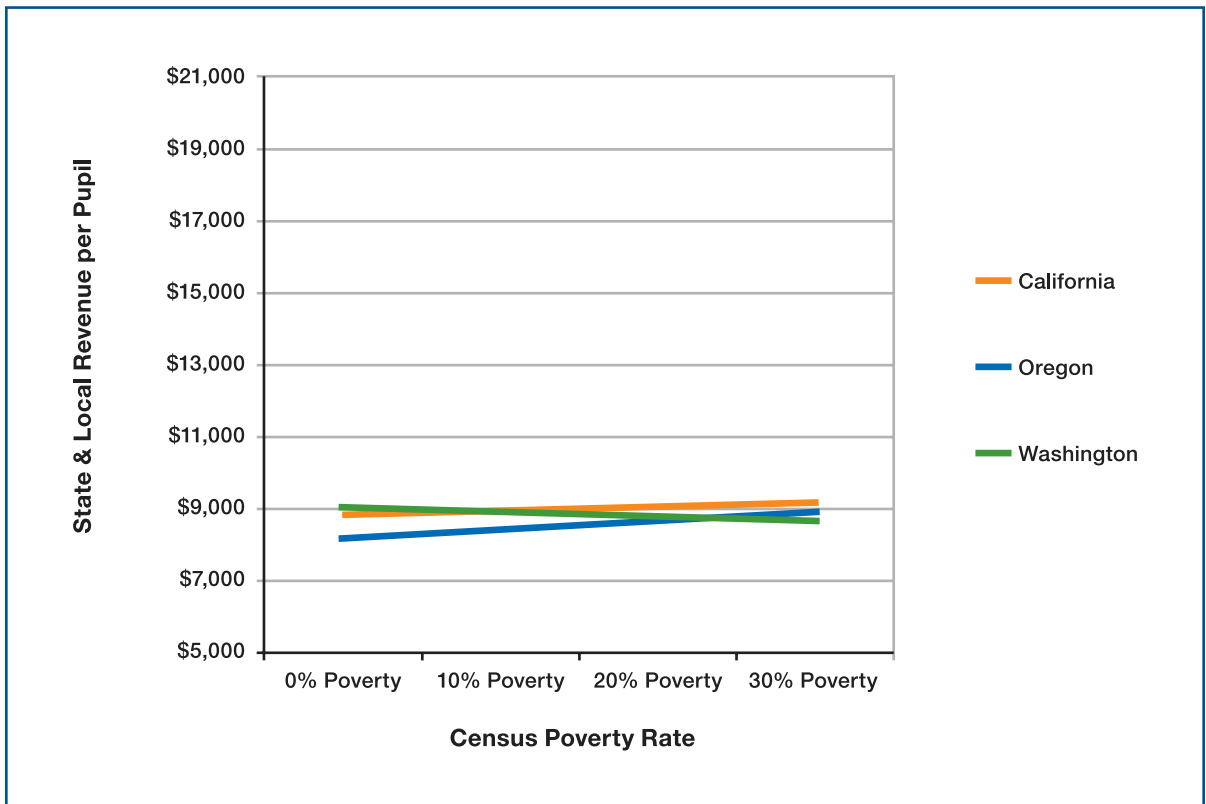
Figure 11: Prairie: Kansas, Nebraska, North Dakota, South Dakota
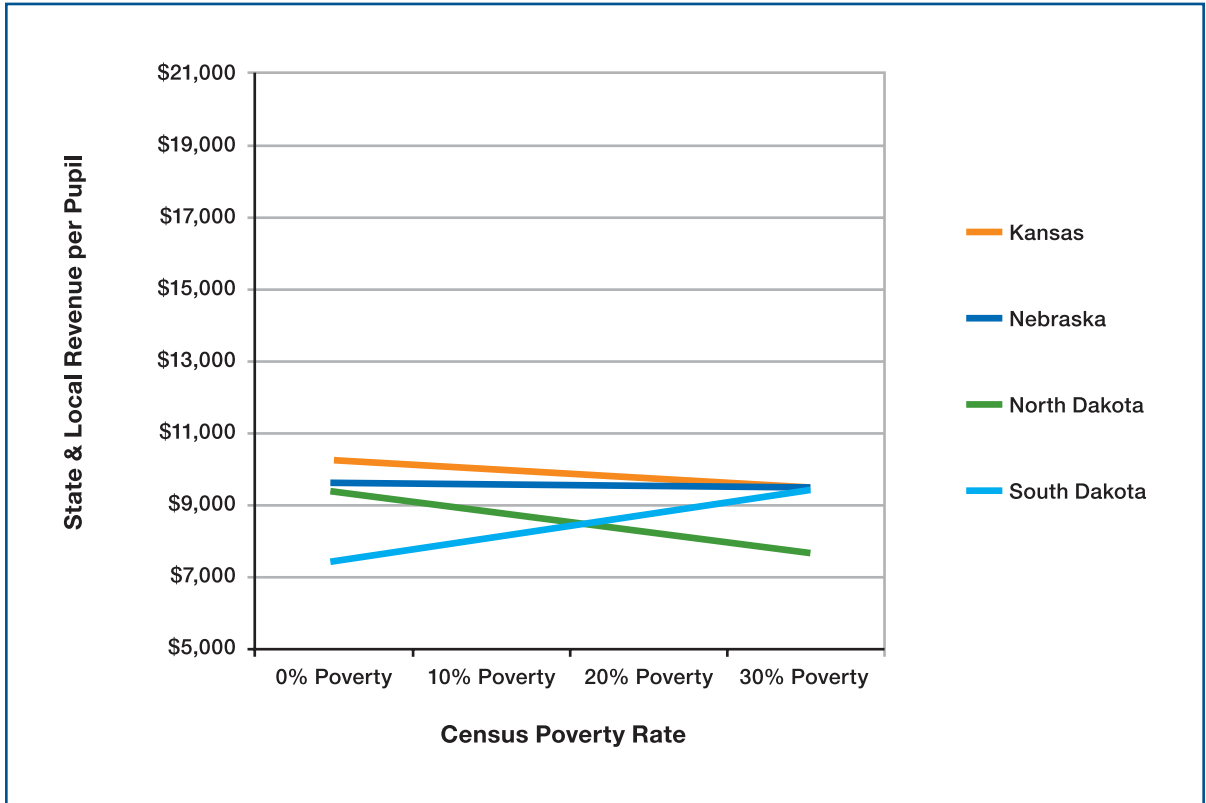
Figure 12: Midwest: Indiana, Michigan, Ohio, Pennsylvania

Is School Funding Fair? A National Report Card
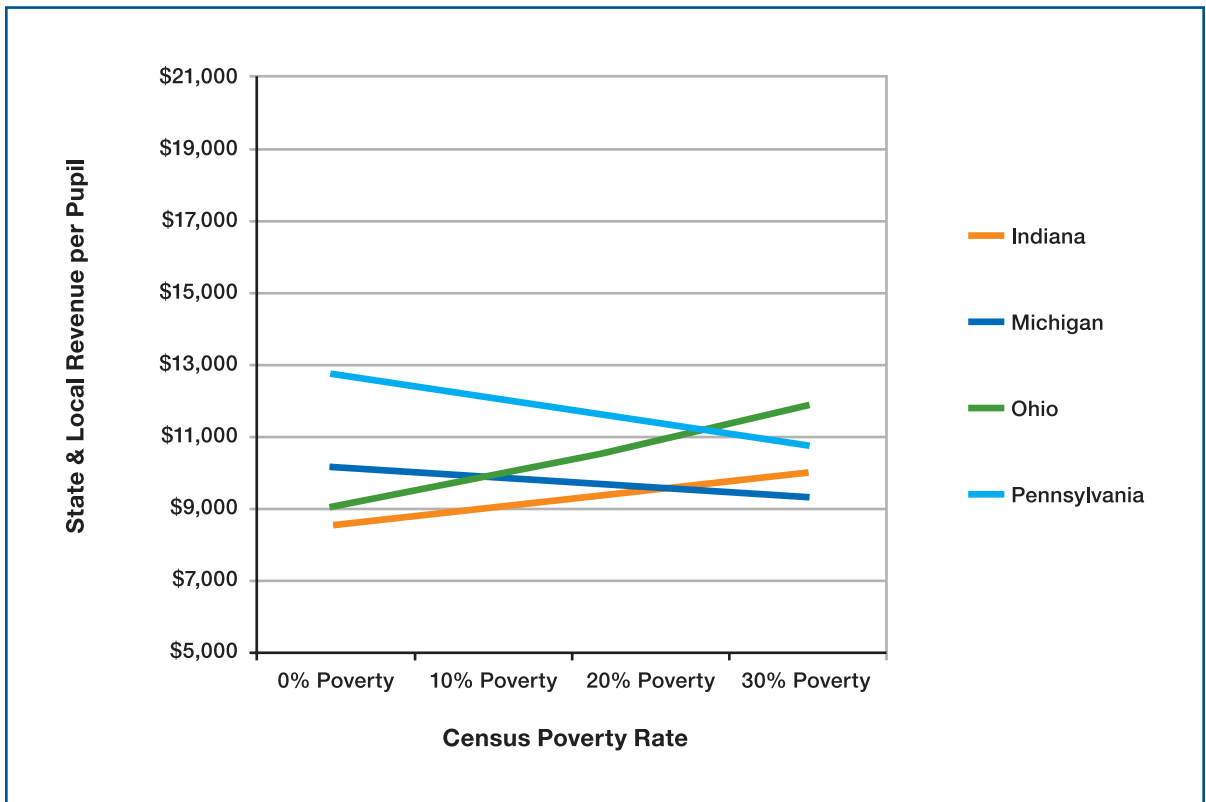
Figure 13: South Coast: Florida, Georgia, North Carolina, South Carolina, Virginia
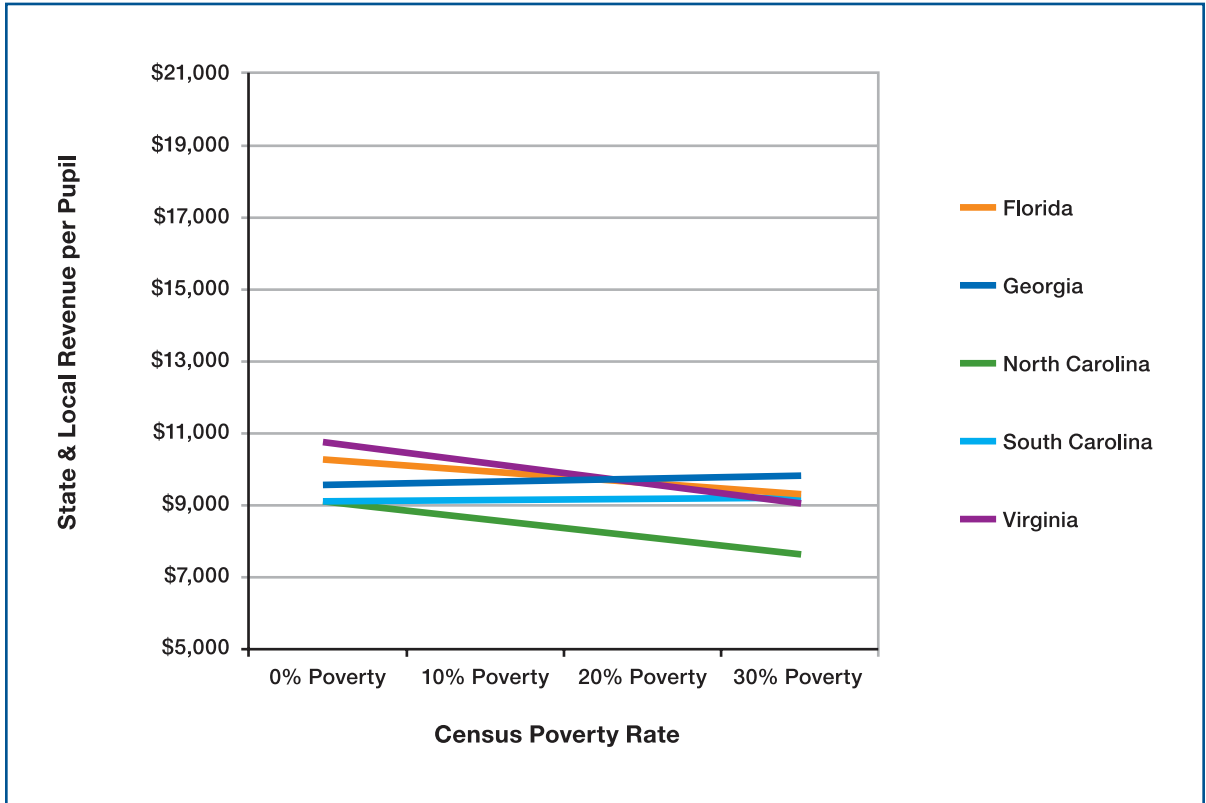
Figure 14: Southwest: Arizona, Colorado, Nevada, New Mexico
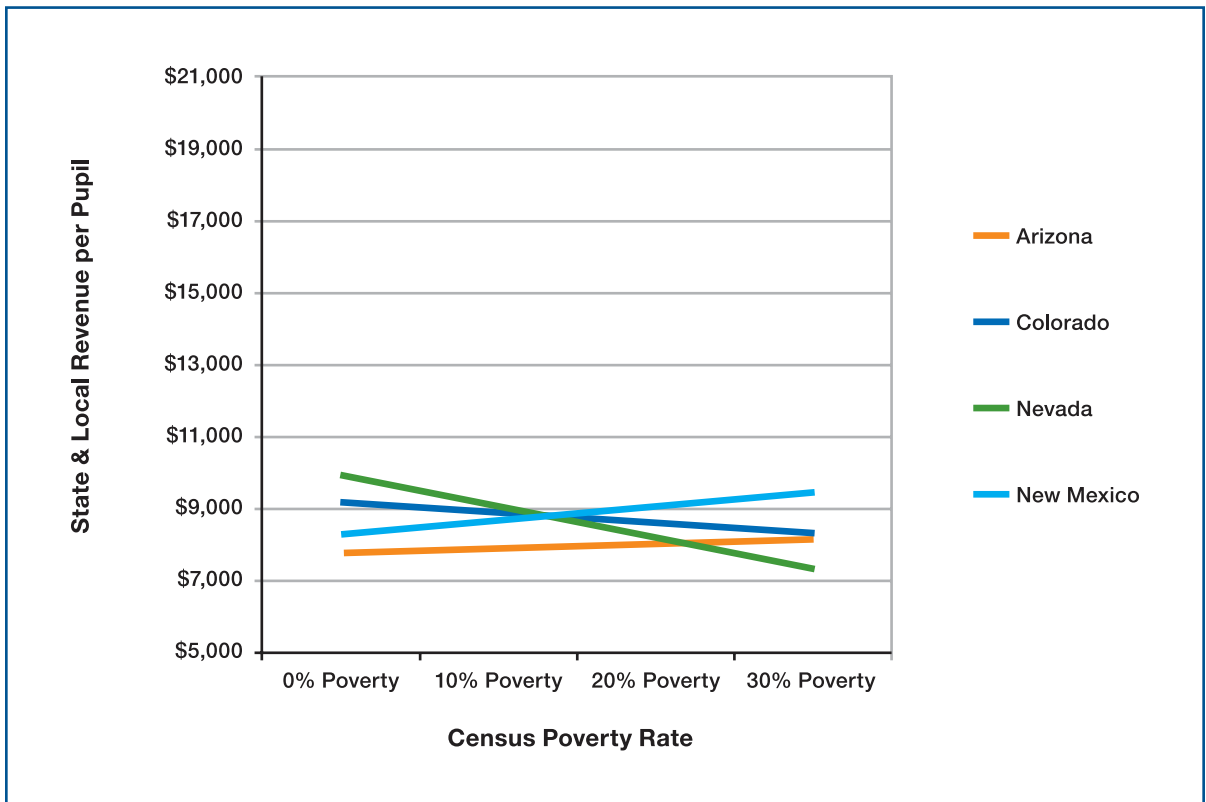
Fairness Measure #3: Effort

The third measure of fairness is the state's effort to fund its public schools, based on the percentage of the state's Gross Domestic Product (GDP) allocated to education, as shown in Table 4. The state GDP represents the value added in production by the labor and capital located within the state. The state GDP is derived as the sum of the gross domestic product by a state originating in all industries in a state. In concept, an industry's GDP by state, referred to as its "value added," is equivalent to its gross output (sales or receipts and other operating income, commodity taxes, and inventory change) minus its intermediate inputs (consumption of goods and services imported or purchased from other U.S. industries). Thus, the GDP used in this fairness measure is the state counterpart of the nation's GDP, the measure of U.S. output.[23]

More importantly, this fairness measure examines the degree of state fiscal capacity to raise funds to support public education. This measure addresses a critical question: What level of effort is a state making to fairly fund its public schools? State effort, as shown in Table 4, is calculated by dividing the sum of state and local revenue per pupil by the state GDP. The measure is essentially a measure of the percent of state-level economic productivity allocated or spent on public education.

Table 4: Fairness Measure #3: State Effort[24]

State	Per capita real GDP by state (in 2000 dollars, adjusted for inflation)	Effort Index	Grade
Vermont	$34,383	0.063	A
New Jersey	$44,834	0.050	A
Maine	$30,248	0.048	A
West Virginia	$24,970	0.044	A
Hawaii	$38,692	0.044	A
Wyoming	$39,807	0.043	A
Michigan	$32,940	0.043	A
New York	$48,869	0.043	A
South Carolina	$28,676	0.042	A
New Hampshire	$37,829	0.042	A
Maryland	$38,788	0.042	B
Ohio	$33,829	0.042	B
Rhode Island	$36,516	0.041	B
Georgia	$34,792	0.041	B
Wisconsin	$35,178	0.041	B
Arkansas	$27,810	0.041	B
Pennsylvania	$35,337	0.041	B
Kansas	$34,571	0.040	B
Mississippi	$24,147	0.040	B

23 Bureau of Economic Analysis, Regional Economic Accounts, "Gross domestic product by state (millions of current dollars)," 2007. (http://www.bea.gov/regional/gsp)

24 Note that while this table includes the inflation-adjusted GDP per capita for each state, the effort calculation was based on actual 2007 GDP by state, and actual 2007 state and local revenues for public education.

Table 4: Fairness Measure #3: State Effort (continued)

State	Per capita real GDP by state (in 2000 dollars, adjusted for inflation)	Effort Index	Grade
Connecticut	$51,139	0.039	C
Alabama	$29,426	0.039	C
Indiana	$33,317	0.038	C
New Mexico	$30,624	0.038	C
Massachusetts	$47,388	0.037	C
Montana	$27,991	0.037	C
Iowa	$36,243	0.037	C
Kentucky	$29,986	0.036	C
Florida	$33,702	0.036	C
Nebraska	$37,131	0.035	D
Minnesota	$41,060	0.035	D
Texas	$38,055	0.035	D
Idaho	$30,442	0.034	D
Illinois	$40,142	0.034	D
Missouri	$32,532	0.034	D
Virginia	$41,608	0.034	D
Alaska	$44,853	0.034	D
California	$42,319	0.034	D
Oklahoma	$28,851	0.033	F
Utah	$32,413	0.031	F
Arizona	$33,300	0.031	F
Washington	$40,218	0.031	F
North Carolina	$36,398	0.030	F
Colorado	$40,742	0.030	F
Oregon	$38,751	0.030	F
North Dakota	$35,454	0.029	F
Nevada	$40,657	0.029	F
Tennessee	$34,012	0.028	F
Louisiana	$33,022	0.028	F
South Dakota	$36,791	0.027	F
Delaware	$58,071	0.024	F

This measure shows a wide variation among states on funding effort. Delaware, South Dakota, Louisiana, and Tennessee are the states with the lowest effort (.024 to .028). Maine, New Jersey, and Vermont represent the states that allocate the greatest share of economic activity to education (.048 to .063). The effort index does not appear to be related to the overall wealth of the state. For example, Delaware has the largest per capita GDP in the nation ($58,071) and ranks as the state with the lowest effort made toward education (.024). But Connecticut and Massachusetts, also

27

Is School Funding Fair? A National Report Card

states with very large per capita GDPs, have average effort indices. Louisiana has a relatively low per capita GDP, and also makes very low effort.

The overall level of resources available for schools in any given state is partly a function of the state's effort to fund schools and partly a function of the wealth of the state. For example, Mississippi exerts average effort, but because it is very poor, its overall funding levels are low — last in the nation. By contrast, Tennessee is ranked 47th in overall funding level, but this is partially because it does not take advantage of its fiscal capacity to fund its school system, as evidenced by the F it receives on the Effort Index.

28

Is School Funding Fair? A National Report Card

Fairness Measure #4: Coverage

The share of school-aged children attending the state's public schools, and the median household income of those children, is a critical but often overlooked factor affecting school funding fairness. As previously noted, the extent to which school-age children attend public school is only partially within the control of state policymakers. However, the extent of public school coverage in a given state, and the overall income level of those students, impacts the effort necessary to fairly fund its public schools. A higher percentage of students in public schools requires a greater state funding effort. Further, a high concentration of children from low-income households in public schools requires not only more state funding effort, but also fair funding distribution. Perhaps most importantly, a high share of private school students from higher-income households affects the public and political will necessary to generate fair funding through the state's finance system.[25]

The Coverage measure for all states is shown in Table 5, including data on the difference in household income between public and private school students. The states are ranked by a combined score of the percentage of students who attend public schools and the household income ratio between public and private school students.

Table 5: Fairness Measure #4: Coverage[26]

State	% 6- to 16-Year-Olds in Public School	Median Household Income (Public School)	Median Household Income (Private School)	Private/Public Income Ratio	Rank
Wyoming	93.8%	$73,353	$92,635	1.26	1
Utah	93.4%	$77,469	$101,571	1.31	2
Maine	89.6%	$65,168	$72,885	1.12	3
Idaho	90.6%	$63,862	$84,349	1.32	4
Alaska	89.6%	$81,217	$105,538	1.30	5
Arizona	91.1%	$67,949	$103,397	1.52	6
Montana	89.0%	$61,978	$83,378	1.35	7
West Virginia	91.4%	$55,035	$87,681	1.59	8
Vermont	89.6%	$72,415	$102,481	1.42	9
New Hampshire	88.0%	$89,756	$112,241	1.25	10
Iowa	88.4%	$70,522	$94,431	1.34	11
Colorado	88.8%	$79,736	$112,392	1.41	12
South Dakota	88.0%	$65,372	$86,906	1.33	13
North Dakota	88.4%	$68,012	$101,174	1.49	14
Nevada	92.4%	$72,711	$141,646	1.95	15
Michigan	88.2%	$70,259	$106,583	1.52	16
Oregon	87.8%	$68,503	$102,822	1.50	17
New Mexico	89.6%	$53,526	$91,893	1.72	18
Kansas	87.5%	$70,003	$108,452	1.55	19
Minnesota	86.7%	$82,859	$121,035	1.46	20

[25] The Coverage measure is a significant equity concern in many of the state fairness profiles. In states that have a high proportion of private school students, the fairness profiles do not include a significant portion of the school population. To the extent that these private school students are disproportionately from higher-income households, a degree of bias is introduced into the fairness profiles.

[26] Data on coverage is based on American Community Survey Data from 2005 to 2007 on 6- to 16-year-olds.

29

Is School Funding Fair? A National Report Card

State	% 6- to 16-Year-Olds in Public School	Median Household Income (Public School)	Median Household Income (Private School)	Private/Public Income Ratio	Rank
New Jersey	85.0%	$100,837	$131,709	1.31	21
Massachusetts	86.7%	$95,291	$141,852	1.49	22
Oklahoma	90.2%	$58,263	$107,892	1.85	23
Nebraska	85.7%	$66,411	$92,351	1.39	24
Connecticut	88.0%	$106,305	$173,829	1.64	25
Texas	91.4%	$63,957	$127,688	2.00	26
Washington	88.4%	$75,138	$127,192	1.69	27
Virginia	87.7%	$84,311	$139,903	1.66	28
Indiana	85.9%	$65,473	$97,926	1.50	29
Arkansas	89.9%	$52,666	$101,996	1.94	30
North Carolina	88.9%	$63,416	$117,173	1.85	31
California	89.2%	$76,334	$143,228	1.88	32
U.S.	*87.1%*	*$71,871*	*$120,046*	*1.67*	
Illinois	85.8%	$78,001	$121,030	1.55	33
South Carolina	87.1%	$59,135	$101,128	1.71	34
Wisconsin	83.7%	$72,277	$99,272	1.37	35
Ohio	84.5%	$67,468	$101,157	1.50	36
Rhode Island	85.5%	$76,379	$123,757	1.62	37
Alabama	86.5%	$58,221	$103,184	1.77	38
Georgia	88.2%	$65,893	$129,358	1.96	39
Mississippi	87.7%	$48,795	$94,289	1.93	40
Kentucky	85.8%	$56,727	$100,827	1.78	41
New York	83.5%	$78,642	$121,654	1.55	42
Pennsylvania	82.5%	$71,943	$104,301	1.45	43
Missouri	83.2%	$64,300	$101,562	1.58	44
Tennessee	87.0%	$59,089	$119,763	2.03	45
Florida	85.8%	$66,417	$128,858	1.94	46
Maryland	81.0%	$90,972	$147,465	1.62	47
Hawaii	79.5%	$79,912	$122,019	1.53	48
Louisiana	80.6%	$52,956	$105,357	1.99	49
Delaware	78.6%	$69,799	$129,167	1.85	50
District of Columbia	77.9%	$52,106	$185,933	3.57	51

Coverage rates vary significantly among the states, from a low of 78% in Washington, D.C., to 94% in Wyoming. In addition, the median household income of public and private school students varies widely. Washington, D.C., also has the highest income ratio (3.57), with a median household income of $185,933 for private school students to $52,106 for public school students.

The Coverage data further illuminate the state fairness profiles. Public schools in Louisiana and Delaware, for example, enroll 80% of their school-age children, with those students disproportionately from lower-income households. As a result, the fairness profile in these states — funding level and distribution to districts relative to poverty — does not capture one-fifth of the school-age children in private schools who are disproportionately higher income.

III. The National Report Card on Fair School Funding

The National Report Card grades and ranks the states on how fairly they fund their public schools. The first two columns show the state grades on Funding Distribution and Effort. The grades address two key questions: What effort does a state make to fairly fund its public schools, and does the state distribute funding to address concentrated student poverty? The last two columns show the state rankings on Funding Level and Coverage. These rankings address two additional questions: How much funding does a state provide for a typical school district, and to what extent does the state's public education system serve its school-age population?

In examining the Report Card results, consideration should be given to all four measures, rather than to any one. The combination of the measures offers deeper insight into state finance systems. For example, Utah shows a progressive funding distribution pattern, receiving an "A," but its level of funding is extremely low. Delaware makes the lowest effort to fund its public schools of any state in the nation and has a regressive distribution pattern, as shown in its fairness profile. Mississippi makes an above-average effort, yet funds its public schools well below the national average and does not provide any significant increase in funding for higher-poverty schools. Texas is low-funding, regressive, and below average on effort, while Ohio, a high-effort state, provides average, but progressive, funding.

The complexities, and sometimes inconsistencies, of the finance systems require careful consideration of the state's performance as a whole.

Table 6: The National Report Card

State	Funding Distribution Grade	Effort Grade	Funding Level Rank	Coverage Rank
Alabama	D	C	33	38
Alaska	--	D	6	5
Arizona	C	F	46	6
Arkansas	C	B	45	30
California	C	D	31	32
Colorado	D	F	35	12
Connecticut	C	C	8	25
Delaware	D	F	10	50
District of Columbia	--	--	3	51
Florida	D	C	22	46
Georgia	C	B	24	39
Hawaii	--	A	7	48
Idaho	D	D	49	4
Illinois	F	D	29	33
Indiana	C	C	27	29
Iowa	C	C	19	11
Kansas	D	B	20	19
Kentucky	C	C	36	41

Is School Funding Fair? A National Report Card

31

Table 6: The National Report Card (continued)

State	Funding Distribution Grade	Effort Grade	Funding Level Rank	Coverage Rank
Louisiana	D	F	30	49
Maine	D	A	14	3
Maryland	D	B	13	47
Massachusetts	B	C	9	22
Michigan	D	A	23	16
Minnesota	A	D	15	20
Mississippi	C	B	47	40
Missouri	D	D	43	44
Montana	B	C	38	7
Nebraska	C	D	25	24
Nevada	F	F	39	15
New Hampshire	F	A	18	10
New Jersey	A	A	2	21
New Mexico	C	C	34	18
New York	D	A	5	42
North Carolina	D	F	44	31
North Dakota	D	F	40	14
Ohio	A	B	17	36
Oklahoma	C	F	50	23
Oregon	C	F	37	17
Pennsylvania	D	B	12	43
Rhode Island	C	B	11	37
South Carolina	C	A	28	34
South Dakota	B	F	41	13
Tennessee	C	F	51	45
Texas	C	D	42	26
Utah	A	F	48	2
Vermont	C	A	4	9
Virginia	D	D	21	28
Washington	C	F	32	27
West Virginia	C	A	26	8
Wisconsin	C	B	16	35
Wyoming	C	A	1	1

Although the Report Card results should be approached with caution, certain national findings stand out:

- Six states are positioned relatively well on all four measures, receiving Cs or higher on Effort and Funding Distribution and a rank in the top half in Funding Level and Coverage. These states are Connecticut, Iowa, Massachusetts, New Jersey, Vermont, and Wyoming. Each of

these states, however, needs improvement in specific areas. For example, Connecticut and Iowa receive Cs for both Funding Distribution and Effort. Connecticut can improve Funding Distribution by providing more funding to all its high-poverty districts, not just a select few, as it currently does. Vermont receives a C in Funding Distribution because its funding structure does not systematically direct more funding to higher-need districts.

- Most of the states have at least one area in which they could improve. To focus on the areas over which states exert the most control, Colorado, Delaware, Idaho, Nevada, North Dakota, and Virginia receive Ds or Fs on both State Effort and Funding Distribution. So not only do these states dedicate a low proportion of their fiscal capacity towards their education system, they also have allocated that money in a way that does not systematically ensure that districts with higher poverty levels get more funding.

- Four states receive below-average ratings on each of the four indicators: Illinois, Louisiana, Missouri, and North Carolina. These are low-effort, regressive states receiving Ds or Fs on both indicators, and ranking below average in terms of the overall level of funding provided and Coverage.

IV. Next Steps

Digging Deeper

The purpose of the National Report Card is to deepen the understanding of the public, education stakeholders, and policymakers about the condition of the nation's 50 state finance systems. The Report Card also is intended to spark a more informed and vigorous discussion and debate — at the local, state and federal levels — concerning the steps needed to improve, strengthen, and sustain fair funding as a key element of the national drive to ensure equal education opportunity for all students.

To facilitate this dialogue, several commonly held misperceptions about school funding generally and, more specifically, about the operation of the 50 state finance systems are addressed below. These misperceptions are based largely on assumptions not supported by reliable and rigorous research data. More importantly, these misperceptions shape current thinking about state school finance issues, and often impede reforms that could improve funding fairness.

Does fair funding improve student outcomes?

Stakeholders, policymakers, and taxpayers often ask if fair school funding makes any difference in student academic performance. The issues surrounding the connection between school funding and student outcomes are complex and involve many additional factors. Any analysis of the relationship between funding and outcomes requires extreme caution and careful statistical analysis, and is beyond the scope of this report. Future research could explore the relationship between states with fair funding systems and their performance on student outcome measures, but only as a starting point for efforts to reform state school finance systems and ensure the effective use of school funding at the district and school levels.

Does greater state share increase funding fairness?

Not necessarily. States fund their schools primarily through a combination of revenue generated by state income, sales and other taxes, and from local property taxes. An analysis of the state revenue share for each state, juxtaposed with the fairness measure for funding distribution relative to poverty, shows no correlation between the state share and within-state fairness, as set forth in Figure 15.

Figure 15: State Share and Funding Distribution
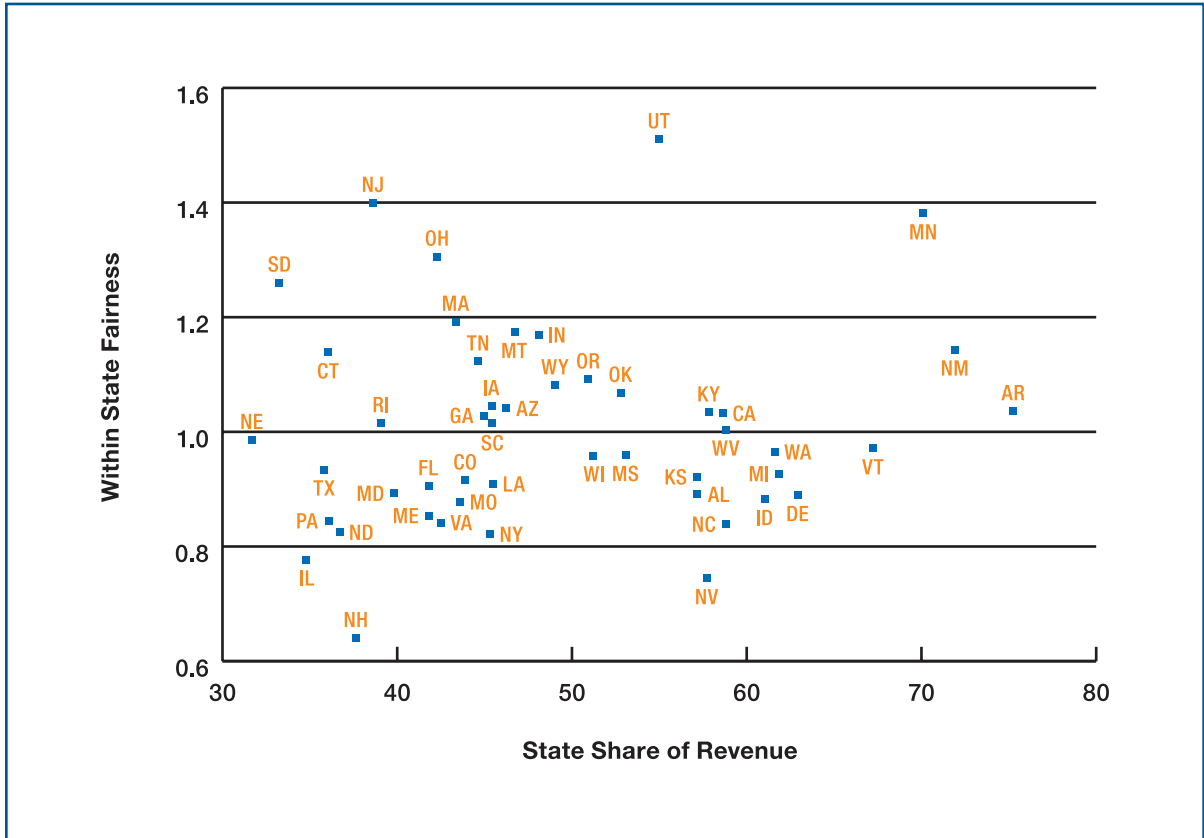
Does state wealth or state effort matter most?

Neither. An analysis shows that wealth and effort independently explain about the same degree of variation in state and local revenue per pupil. In other words, a state's wealth isn't the sole predictor of funding fairness. The effort a state makes also has a significant impact.

Is there a better measure of student poverty?

The most widely used measure for student poverty is the U.S. Census poverty threshold, which is used in the research for the National Report Card. The Census measure, however, sets one common poverty threshold for all states and regions without consideration for geographic differences in the cost of living. While the Census poverty threshold does take into account the costs associated with family size and family structure — in other words, how many adults versus children are in the family — it is not adjusted for geographic differences in the cost of living. In other words, it implicitly assumes that the same amount of money provides the same amount of resources, regardless of location.

The definition of poverty is important in the development of this report card because it calls into question the number of students considered low income, which impacts the funding needed to ensure those students an equal education opportunity. The Census measure we use may underestimate the number of students in poverty in high-cost states and regions and overestimate the number of those students in low-cost states and regions. Figure 16 shows the variation in poverty

rates under the Census measure when compared with an average of several alternative measures that take geographic cost differences into account.[27] California and New York stand out as two states that have moderate poverty levels on the Census measure, but have among the highest poverty rates under the alternative, geographic cost-sensitive measures. Appendix E shows multiple alternative measures of poverty for all states.

Figure 16: U.S. Census Poverty Rate and Mean Corrected Poverty Rate
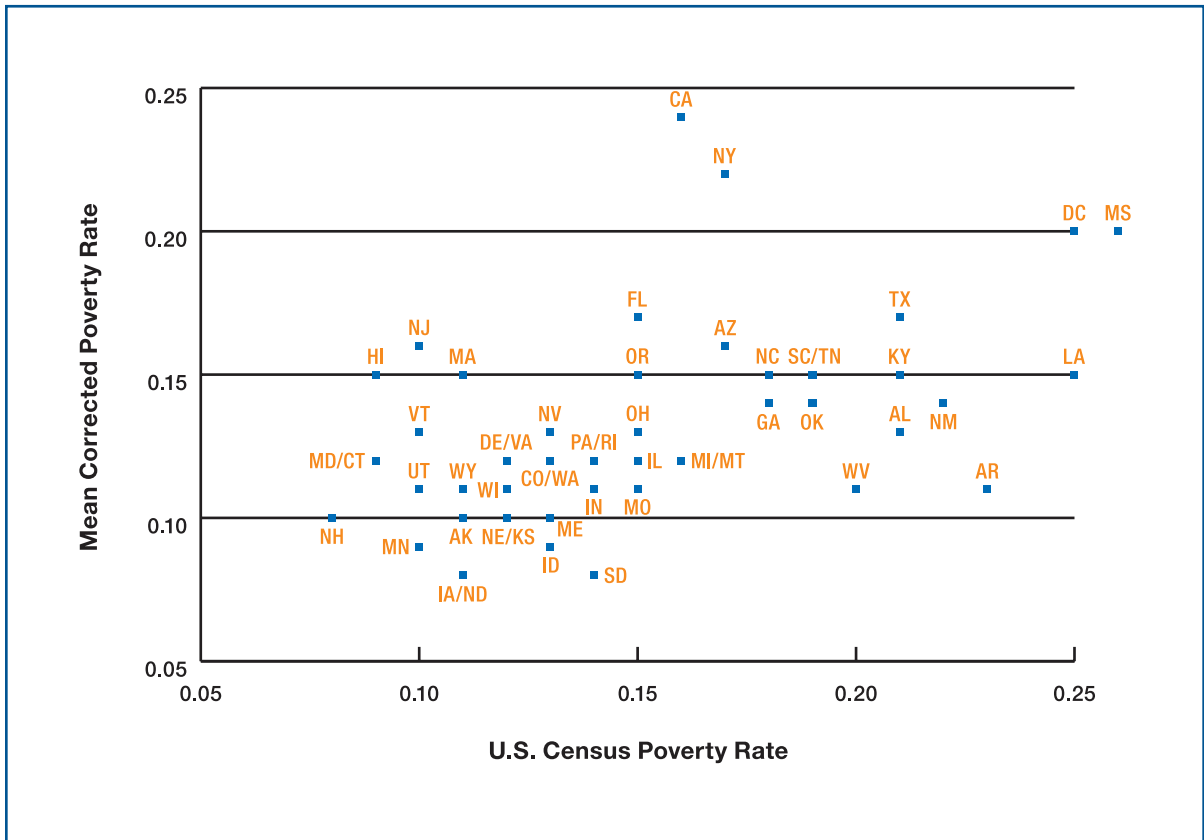
Does school district organization matter?

Yes. Economies of scale remain a significant factor affecting the costs of providing public schooling. Research shows that per-pupil costs level off as districts reach a "scale efficient" enrollment size of around 2,000 students. Organizational differences across state public education systems are vast and cannot be ignored. But the context of those organizational differences is equally important. For example, Illinois and New Jersey both have significant shares of children served in small, nonunified public school districts and, in many cases, these districts are relatively affluent, high-spending districts. Alaska, on the other hand, faces unavoidably high costs in districts that are extremely remote and sparsely populated. The unique factors that affect school district organization, especially in a state like Alaska, complicate the relationship between organization and funding fairness.

---

[27] Renwick, Trudi. *Alternative Geographic Adjustments of U.S. Poverty Thresholds: Impact on State Poverty Rates*. U.S. Census Bureau, August 2009.

Does federal funding affect state fairness?

Only marginally. Federal funding, primarily through the Title 1 program, represents a small fraction of public school funding. As a result, it has only a slight impact on state Funding Levels, and little effect on Funding Distribution. Policymakers often assume that federal Title I funding or grants improve Funding Level and Distribution, which simply is not the case. Further, Title I program rules do not limit the state's ability to use Title I funds to reinforce regressive school finance systems, or to supplant and not supplement state efforts to provide fair school funding. Appendix F illustrates this point by providing the fairness profiles of select states with the addition of Title I funds.

Can we expect fairness to improve in some states?

Yes. Several states have instituted school funding reforms since 2006 – 2007, the last year of available data used to calculate the fairness measures and National Report Card. These include Pennsylvania and New York, states with regressive fairness profiles and low grades on the National Report Card.

While more recent data will likely show that these states improved on funding fairness, it is important to note that the recent economic downturn and corresponding state reductions in school aid may offset improvements in these states, while further eroding funding fairness in other states. The overall absence of revenue stability in our state finance systems requires regular updating of the fairness measures and rankings as new data become available.

Improving Funding Fairness

The National Report Card brings into sharper focus the condition of state finance systems and the serious challenges that confront local communities, states, and federal government in ensuring fair school funding for all of our nation's public school students.

The following are some initial questions education stakeholders, community leaders, elected officials, and concerned citizens may want to ask in approaching the issue of state school finance reform:

- In communities: Is our local district receiving sufficient funding through the state's finance system? If the district is high-poverty, does it receive additional funds to support a high-quality education? Is our district distributing funding among its schools fairly? Are there mechanisms in place to drive funding to uses and programs in schools and classrooms that have been shown to be effective?

- In states: How does our state rank on the fairness measures in the National Report Card? What does our state's fairness profile look like? Is the finance system regressive, progressive, or neutral? Is more revenue needed to increase the funding level? Is more funding required for high-poverty districts? If the system is progressive, how can that pattern be sustained from year to year? Are there policies in place to ensure districts utilize all school funding effectively?

- At the federal level: How can the fairness measures and profiles be used as metrics to assess whether individual states are fairly funding their schools? How can federal funding be used to promote needed school finance reforms at the state level? What conditions might be placed on the receipt of federal funding to spark improvements in state finance systems?

Conclusion

An oft-repeated refrain in the debate over how to improve public education is that the United States, in raw dollars, spends "a lot" on education, "more" than some other developed countries. But what does "a lot" mean? Are all states sufficiently funding our public schools, especially given high levels of student poverty and the expectations that all children achieve, even those with additional needs? Is our funding distributed fairly? Do all students and schools, especially those with high need, receive the resources necessary to meet rigorous academic standards? And are states ensuring that school funding is used efficiently and being put to the most effective use possible?

These are challenging questions that face not just our public schools, but all of our communities and states, as well as our nation. It is hoped that the National Report Card on School Funding contributes valuable information to help answer those questions and advance the effort to fairly fund public education. Our students and nation depend on it.

Appendix

Appendix A: National Child and Student Poverty Rates[28]

State	Census SAIPE Poverty Rate	% Free/Reduced (CCD)	Predicted Free/Reduced at 10% Poverty	Predicted Free/Reduced at 20% Poverty
Mississippi	26%	68%	42%	58%
Louisiana	25%	62%	45%	56%
District of Columbia	25%	56%	25%	46%
Arkansas	23%	59%	35%	54%
New Mexico	22%	61%	38%	57%
Alabama	21%	51%	28%	49%
Kentucky	21%	51%	37%	50%
Texas	21%	47%	41%	47%
West Virginia	20%	50%	36%	49%
Tennessee	19%	48%	30%	49%
Oklahoma	19%	55%	37%	58%
South Carolina	19%	51%	33%	54%
Georgia	18%	50%	37%	54%
North Carolina	18%	44%	32%	48%
Arizona	17%	42%	27%	47%
New York	17%	28%	25%	47%
Montana	16%	35%	24%	42%
California	16%	50%	34%	62%
Michigan	16%	35%	25%	44%
Missouri	15%	39%	28%	48%
Florida	15%	45%	34%	56%
Ohio	15%	33%	22%	44%
Oregon	15%	42%	32%	54%
Illinois	15%	38%	25%	52%
Rhode Island	14%	33%	23%	44%
Indiana	14%	37%	28%	52%
Pennsylvania	14%	31%	23%	45%
South Dakota	14%	29%	27%	32%
Idaho	13%	38%	31%	52%
Nevada	13%			

[28] New York's average poverty rate based on the CCD's free and reduced lunch count is incorrect due to incomplete district level data. Similar errors may exist for other states. As these figures were not used in this report's analysis, there is no impact on our findings.

State	Census SAIPE Poverty Rate	% Free/Reduced (CCD)	Predicted Free/Reduced at 10% Poverty	Predicted Free/Reduced at 20% Poverty
Colorado	13%	34%	26%	51%
Maine	13%	35%	28%	48%
Washington	13%	37%	30%	55%
Delaware	12%	38%	34%	53%
Nebraska	12%	36%	30%	57%
Kansas	12%	40%	34%	63%
Wisconsin	12%	31%	27%	49%
Virginia	12%	31%	28%	47%
Massachusetts	11%	28%	25%	51%
Iowa	11%	32%	30%	53%
North Dakota	11%	30%	28%	47%
Alaska	11%	34%	32%	50%
Wyoming	11%	30%	28%	50%
Minnesota	10%	30%	30%	56%
Utah	10%	31%	31%	55%
Vermont	10%	27%	27%	52%
New Jersey	10%	27%	27%	56%
Connecticut	9%	27%	29%	60%
Maryland	9%	32%	34%	61%
Hawaii	9%	41%	42%	63%
New Hampshire	8%	18%	23%	45%

Appendix B: NCES State and Local Revenues per Pupil by State[29]

State	Mean Actual State and Local Revenue per Pupil	State	Mean Actual State and Local Revenue per Pupil
District of Columbia	$17,823	California	$9,774
Vermont	$17,552	Washington	$9,366
New York	$17,247	Indiana	$9,271
New Jersey	$17,115	Montana	$9,158
Wyoming	$16,238	South Carolina	$9,155
Hawaii	$15,362	West Virginia	$9,072
Connecticut	$15,132	North Dakota	$9,063
Massachusetts	$14,355	Colorado	$9,012
Delaware	$13,572	New Mexico	$8,890
Rhode Island	$13,114	Nevada	$8,829
Maryland	$12,948	Texas	$8,813
Alaska	$12,504	Louisiana	$8,806
New Hampshire	$12,351	Missouri	$8,689
Pennsylvania	$12,282	Alabama	$8,591
Maine	$11,903	Kentucky	$8,585
Wisconsin	$10,999	Oregon	$8,525
Ohio	$10,933	North Carolina	$8,401
Minnesota	$10,893	South Dakota	$8,347
Virginia	$10,854	Arkansas	$8,158
Michigan	$10,200	Arizona	$8,091
Illinois	$10,179	Mississippi	$7,102
Kansas	$10,040	Oklahoma	$7,053
Georgia	$9,969	Tennessee	$6,966
Florida	$9,947	Idaho	$6,898
Nebraska	$9,881	Utah	$6,586
Iowa	$9,879		

---

[29] U.S. Census Bureau, Public Elementary-Secondary School Finance Data, 2007. (http://www.census.gov/govs/school)

Is School Funding Fair? A National Report Card

41

Appendix C: *Education Week* Rankings (2007)[30]

State	Grade	Within-State Adequacy	Within-State Equity	Between-State Adequacy			Effort
		Actual spending as percent of amount needed to bring all students to median level (in state)	Difference in per-pupil spending levels at the 95th and 5th percentiles	Per-pupil expenditures (PPE), adjusted for regional cost differences (2005)	Percent of students in districts with PPE at or above U.S. average (2005)	Per-pupil spending levels weighted by the degree to which districts meet or approach the national average for expenditures (cost and student-need adjusted)	Percent of total taxable resources spent on education (2005)
Rhode Island	(A-, 89.7)	90	$5,148	$10,581	84.8%	99	4.0%
Wyoming	(A-, 89.7)	94	$9,910	$11,126	100.0%	100	3.8%
Ohio	(B-, 80.2)	92	$2,644	$9,441	55.9%	97	4.2%
New Hampshire	(B-, 80.5)	84	$6,138	$9,323	65.2%	96	3.9%
Michigan	(B-, 81.1)	92	$2,996	$9,197	48.4%	96	4.5%
Pennsylvania	(B-, 81.5)	93	$3,435	$9,985	56.4%	98	4.0%
Alaska	(B-, 81.9)	94	$14,764	$8,562	22.7%	89	3.5%
Delaware	(B-, 82.0)	92	$3,521	$10,661	93.7%	100	2.2%
West Virginia	(B, 83.8)	94	$1,626	$10,073	100.0%	100	4.6%
Massachusetts	(B, 85.1)	90	$6,399	$9,930	77.0%	99	3.7%
Maryland	(B, 85.4)	95	$3,696	$9,829	95.3%	100	3.8%
Wisconsin	(B, 86.4)	95	$3,588	$10,199	96.8%	100	4.1%
Maine	(B+, 86.9)	88	$5,605	$10,539	87.5%	100	4.6%
New York	(B+, 87.2)	86	$7,313	$12,218	100.0%	100	4.2%
Connecticut	(B+, 87.4)	92	$5,391	$10,652	99.8%	100	3.9%
New Jersey	(B+, 87.9)	91	$6,173	$12,252	99.5%	100	4.9%
Vermont	(B+, 88.0)	83	$7,092	$12,105	92.0%	99	5.2%
Florida	(C-, 71.2)	94	$2,837	$7,539	3.8%	87	3.0%
Alabama	(C-, 72.0)	94	$1,980	$7,924	16.3%	92	3.4%
South Dakota	(C-, 72.1)	96	$4,510	$8,736	33.2%	92	2.9%
Kentucky	(C-, 72.3)	92	$1,920	$7,978	9.0%	91	3.4%
Washington	(C-, 72.3)	92	$5,839	$7,432	4.9%	86	3.1%
Illinois	(C-, 72.4)	91	$4,743	$8,621	25.4%	91	3.5%
North Dakota	(C, 72.7)	91	$4,418	$9,181	51.0%	96	3.1%
Missouri	(C, 73.4)	90	$3,659	$8,276	19.6%	88	3.5%
South Carolina	(C, 73.6)	94	$3,060	$8,339	30.6%	94	4.0%

---

[30] *Education Week,* EPE Research Center, Education Counts Database. Accessible at http://www.edweek.org/rc/2007/06/07/edcounts.htm.

State	Grade	Within-State Adequacy — Actual spending as percent of amount needed to bring all students to median level (in state)	Within-State Equity — Difference in per-pupil spending levels at the 95th and 5th percentiles	Between-State Adequacy — Per-pupil expenditures (PPE), adjusted for regional cost differences (2005)	Between-State Adequacy — Percent of students in districts with PPE at or above U.S. average (2005)	Between-State Adequacy — Per-pupil spending levels weighted by the degree to which districts meet or approach the national average for expenditures (cost and student-need adjusted)	Effort — Percent of total taxable resources spent on education (2005)
Montana	(C, 74.0)	93	$6,505	$8,951	38.5%	91	3.7%
New Mexico	(C, 74.0)	98	$5,233	$8,431	22.4%	88	3.7%
Oregon	(C, 74.0)	93	$3,957	$8,353	19.7%	90	3.2%
California	(C, 74.1)	93	$4,633	$7,081	3.0%	82	3.3%
Colorado	(C, 74.2)	93	$4,865	$7,939	25.3%	92	3.0%
Iowa	(C, 74.9)	95	$2,414	$9,026	36.5%	96	3.5%
Arkansas	(C, 75.9)	94	$2,355	$8,790	39.5%	96	4.1%
Georgia	(C+, 77.1)	94	$3,530	$8,658	42.1%	97	3.7%
Minnesota	(C+, 77.4)	94	$3,899	$8,891	41.9%	95	3.5%
Nebraska	(C+, 77.5)	96	$4,117	$9,930	40.5%	95	3.5%
Kansas	(C+, 78.0)	95	$4,176	$8,862	40.3%	95	3.8%
Indiana	(C+, 79.1)	90	$3,785	$9,542	64.8%	97	4.5%
Virginia	(C+, 79.5)	93	$4,163	$9,169	65.3%	98	3.2%
Louisiana	(D, 64.1)	95	$3,335	$8,582	36.7%	96	2.9%
Nevada	(D, 65.1)		$13,541	$7,141	6.7%	84	2.8%
Idaho	(D, 65.8)	89	$4,121	$6,867	7.6%	80	3.5%
Utah	(D+, 66.7)	98	$6,343	$5,463	1.1%	66	3.3%
Tennessee	(D+, 67.7)	93	$2,092	$7,506	2.0%	84	2.7%
Mississippi	(D+, 67.8)	93	$2,396	$7,513	6.4%	86	3.8%
North Carolina	(D+, 67.8)	96	$3,090	$7,525	15.6%	91	2.7%
Arizona	(D+, 67.9)	93	$5,775	$6,232	4.5%	72	3.4%
Oklahoma	(D+, 69.2)	91	$4,062	$7,331	9.0%	81	3.3%
Texas	(D+, 69.3)	94	$4,756	$7,687	11.5%	88	3.3%
Washington, D.C.	(NA, NA)	2	$2	$12,429	100.0%	100	
Hawaii	(NA, NA)	3	$3	$9,022	100.0%	100	3.7%

Appendix D: Education Trust Rankings (2006)[31]

State	Poverty Funding Gap '04 (no Adj.)	Poverty Funding Gap '04 (with Adj.)	Race Funding Gap '04 (no Adj.)	Race Funding Gap '04 (with Adj.)	State	Poverty Funding Gap '04 (no Adj.)	Poverty Funding Gap '04 (with Adj.)	Race Funding Gap '04 (no Adj.)	Race Funding Gap '04 (with Adj.)
Alaska	$2,474	$2,054	$4,955	$4,435	Delaware	-$207	-$371	$408	$353
New Jersey	$1,824	$1,069	$1,730	$1,087	Rhode Island	$311	-$394	-$21	-$639
Minnesota	$1,349	$950	$898	$623	Maryland	-$123	-$432	-$302	-$454
Massachusetts	$1,299	$694	$1,663	$1,139	Vermont	-$114	-$436	$418	$239
New Mexico	$1,106	$679	$246	$18	South Dakota	-$147	-$438	-$962	-$1,140
Utah	$860	$663	-$202	-$311	Colorado	-$70	-$440	-$799	-$1,032
Kentucky	$852	$448	$150	$274	Florida	-$272	-$461	$17	-$106
Tennessee	$591	$330	$275	$202	Louisiana	-$200	-$481	$355	$111
Oregon	$579	$302	$222	$127	Arkansas	-$158	-$500	$445	$253
Nebraska	$515	$210	-$1,280	-$1,374	Wyoming	-$303	-$539	-$1,020	-$1,041
South Carolina	$414	$127	$392	$206	Maine	-$137	-$543	-$817	-$874
Ohio	$683	$113	$1,285	$942	North Carolina	-$344	-$543	-$211	-$296
Indiana	$518	$93	$1,345	$1,096	Alabama	-$323	-$656	-$241	-$437
Connecticut	$666	$59	-$74	-$602	Arizona	-$225	-$736	-$230	-$680
North Dakota	$271	$17	-$1,259	-$1,290	West Virginia	-$351	-$742	-$1,043	-$1,270
Washington	$196	-$110	-$87	-$225	Texas	-$249	-$757	-$792	-$1,167
Iowa	$82	-$176	-$327	-$414	Kansas	-$549	-$885	-$1,514	-$1,630
Mississippi	$207	-$191	$413	$26	Virginia	-$403	-$894	-$800	-$613
Oklahoma	$133	-$213	-$133	-$383	Michigan	-$573	-$1,072	$68	-$251
Idaho	-$55	-$257	-$836	-$849	Montana	-$789	-$1,148	-$1,787	-$1,838
California	$218	-$259	-$160	-$499	New Hampshire	-$1,084	-$1,297	-$2,371	-$2,392
Missouri	$190	-$271	$795	$662	*U.S. MEAN*	*-$825*	*-$1,307*	*-$908*	*-$1,213*
Georgia	$156	-$292	$566	$271	Pennsylvania	-$1,001	-$1,511	-$454	-$709
Nevada	-$249	-$297	-$470	-$496	Illinois	-$1,924	-$2,355	-$1,223	-$1,524
Wisconsin	-$22	-$345	$244	$290	New York	-$2,319	-$2,927	-$2,239	-$2,636

---

[31] Education Trust, Funding Gaps 2006. (http://www.edtrust.org/sites/edtrust.civicactions.net/files/publications/files/FundingGap2006.pdf) Most recent report available. The 2008 report was retracted due to data errors and has not yet been re-released.

Appendix E: A Better Measure for Student Poverty[32]

State	Census SAIPE Poverty Rate	Census Alternative Estimates (cost adjustment method)			
		FMR (Fair Market Rents)	ACS Median	RPP (Regional Price Parities)	Average Adjusted Rate
California	15.67%	23.49	21.61	26.29	23.80
New York	16.81%	21.37	18.52	27.45	22.45
District of Columbia	24.51%	24.77	18.50	18.07	20.45
Mississippi	26.26%	19.60	21.49	17.98	19.69
Texas	20.61%	16.91	17.95	16.16	17.01
Florida	15.08%	16.10	18.12	15.62	16.61
Arizona	17.42%	16.25	17.14	15.19	16.19
New Jersey	9.76%	15.54	13.79	17.69	15.67
South Carolina	18.55%	15.53	16.60	13.41	15.18
Hawaii	9.23%	14.17	14.12	16.76	15.02
Massachusetts	11.24%	16.06	12.69	16.06	14.94
Louisiana	24.53%	15.08	15.59	13.97	14.88
Tennessee	19.37%	14.92	15.78	13.58	14.76
Kentucky	20.97%	15.37	15.61	12.95	14.64
Oregon	14.73%	14.19	15.05	14.66	14.63
North Carolina	17.53%	14.98	15.77	12.88	14.54
Georgia	17.63%	14.41	16.08	12.96	14.48
New Mexico	22.16%	14.25	14.46	12.22	13.64
Oklahoma	18.86%	13.27	14.86	12.75	13.63
Alabama	21.20%	13.39	14.79	11.50	13.23
Ohio	15.08%	12.69	13.71	11.92	12.77
Nevada	13.29%	12.31	14.20	11.49	12.67
Vermont	9.82%	12.52	12.44	12.53	12.50
Delaware	12.25%	12.22	13.31	11.20	12.24
Connecticut	9.27%	12.05	10.80	13.64	12.16
Rhode Island	14.49%	12.57	10.68	13.23	12.16

---

[32] Renwick, Trudi. *Alternative Geographic Adjustments of U.S. Poverty Thresholds: Impact on State Poverty Rates.* U.S. Census Bureau, August 2009.

State	Census SAIPE Poverty Rate	Census Alternative Estimates (cost adjustment method)			
		FMR (Fair Market Rents)	ACS Median	RPP (Regional Price Parities)	Average Adjusted Rate
Illinois	14.65%	12.23	11.95	12.09	12.09
Montana	16.15%	12.73	12.88	10.64	12.08
Washington	12.70%	11.27	12.10	12.54	11.97
Pennsylvania	13.71%	12.21	11.82	11.30	11.78
Colorado	13.27%	12.34	11.84	11.13	11.77
Michigan	15.54%	11.80	11.81	11.66	11.76
Virginia	11.72%	12.17	12.24	10.73	11.71
Maryland	9.25%	12.14	11.68	10.93	11.58
Indiana	13.95%	11.84	12.19	10.15	11.39
Arkansas	22.61%	11.02	12.48	9.27	10.92
West Virginia	20.26%	11.49	11.88	8.94	10.77
Wisconsin	11.92%	10.41	11.22	10.65	10.76
Missouri	15.31%	11.15	11.24	9.47	10.62
Utah	9.83%	10.59	11.95	9.09	10.54
Wyoming	10.56%	9.83	11.22	10.49	10.51
Maine	13.16%	10.67	10.37	10.13	10.39
Nebraska	12.21%	10.01	10.77	9.93	10.24
Kansas	12.17%	10.28	10.86	9.02	10.05
Alaska	10.81%	9.17	9.83	10.15	9.72
New Hampshire	7.84%	9.39	9.28	10.01	9.56
Idaho	13.43%	9.56	10.07	8.59	9.41
Minnesota	9.93%	9.24	9.04	8.45	8.91
Iowa	11.18%	8.62	8.62	8.01	8.42
North Dakota	11.17%	8.20	8.34	7.29	7.94
South Dakota	13.60%	7.81	7.87	7.91	7.86

46

Is School Funding Fair? A National Report Card

State	Mean Actual State and Local Revenue per Pupil with Title I	Predicted State and Local Revenue per Pupil with Federal Title I			
		At 0% Poverty	At 10% Poverty	At 20% Poverty	At 30% Poverty
Alabama	$8,880	$9,276	$9,162	$9,050	$8,939
Alaska	$12,813	$7,998	$11,955	$17,870	$26,711
Arizona	$8,350	$7,751	$8,033	$8,325	$8,627
Arkansas	$8,406	$8,026	$8,283	$8,549	$8,823
California	$10,068	$8,764	$9,098	$9,443	$9,803
Colorado	$9,184	$9,060	$8,990	$8,921	$8,852
Connecticut	$15,312	$13,092	$13,926	$14,814	$15,758
Delaware	$13,831	$13,262	$13,198	$13,135	$13,071
District of Columbia	$19,089	$16,616	$16,412	$16,210	$16,011
Florida	$10,200	$10,122	$10,020	$9,919	$9,818
Georgia	$9,969	$9,534	$9,618	$9,702	$9,787
Hawaii	$15,682	$15,195	$15,008	$14,824	$14,642
Idaho	$7,078	$7,381	$7,291	$7,203	$7,115
Illinois	$10,434	$10,281	$9,715	$9,180	$8,675
Indiana	$9,445	$8,497	$9,097	$9,740	$10,428
Iowa	$10,008	$9,710	$9,988	$10,273	$10,567
Kansas	$10,233	$10,228	$10,175	$10,123	$10,072
Kentucky	$8,585	$8,526	$8,626	$8,728	$8,831
Louisiana	$9,208	$9,537	$9,422	$9,307	$9,195
Maine	$12,136	$12,493	$12,072	$11,665	$11,272
Maryland	$13,157	$12,279	$12,054	$11,833	$11,616
Massachusetts	$14,587	$12,084	$13,039	$14,069	$15,181
Michigan	$10,457	$9,903	$9,919	$9,934	$9,949
Minnesota	$11,027	$9,352	$10,578	$11,963	$13,530
Mississippi	$7,463	$7,448	$7,552	$7,657	$7,763
Missouri	$8,889	$8,941	$8,728	$8,520	$8,316

State	Mean Actual State and Local Revenue per Pupil with Title I	Predicted State and Local Revenue per Pupil with Federal Title I			
		At 0% Poverty	At 10% Poverty	At 20% Poverty	At 30% Poverty
Montana	$9,462	$7,772	$8,435	$9,155	$9,935
Nebraska	$10,070	$9,577	$9,741	$9,908	$10,077
Nevada	$9,003	$9,953	$9,131	$8,377	$7,686
New Hampshire	$12,499	$13,058	$11,510	$10,147	$8,944
New Jersey	$17,297	$13,419	$15,191	$17,197	$19,468
New Mexico	$9,196	$8,296	$8,810	$9,355	$9,934
New York	$17,692	$16,862	$16,101	$15,375	$14,681
North Carolina	$8,401	$9,125	$8,612	$8,128	$7,671
North Dakota	$9,450	$8,970	$9,112	$9,256	$9,402
Ohio	$10,933	$9,055	$9,896	$10,814	$11,818
Oklahoma	$7,302	$6,575	$6,896	$7,231	$7,584
Oregon	$8,791	$8,134	$8,584	$9,058	$9,559
Pennsylvania	$12,537	$12,577	$12,166	$11,769	$11,384
Rhode Island	$13,427	$12,094	$12,392	$12,698	$13,012
South Carolina	$9,410	$8,999	$9,233	$9,473	$9,720
South Dakota	$8,655	$7,408	$8,263	$9,215	$10,278
Tennessee	$7,169	$6,386	$6,760	$7,156	$7,575
Texas	$9,069	$8,651	$8,621	$8,591	$8,561
Utah	$6,681	$5,673	$6,636	$7,762	$9,080
Vermont	$17,640	$15,734	$15,762	$15,789	$15,817
Virginia	$11,047	$10,688	$10,305	$9,936	$9,581
Washington	$9,565	$8,925	$9,089	$9,256	$9,425
West Virginia	$9,467	$9,307	$9,543	$9,785	$10,033
Wisconsin	$11,181	$10,732	$10,797	$10,862	$10,927
Wyoming	$16,575	$16,178	$17,056	$17,982	$18,958
U.S.		$10,066	$10,247	$10,470	$10,742

48

Is School Funding Fair? A National Report Card