



# A Review Of School Funding Adequacy Studies

Presentation to the  
Education Assessment and Accountability Review Subcommittee by the  
Office of Education Accountability  
October 18, 2022

## Major Conclusions

- Difficult to determine the cost of an adequate education in Kentucky based on the definition
- Adequacy studies have limitations:
  - Never adequately funded
  - Prototypical schools and districts
  - No guarantee more money will produce outcomes
  - State specific
  - May rely on insufficient research and assumptions

## Major Conclusions

- The 2014 Kentucky Adequacy Study
  - Required an additional \$2.44 billion to be adequate
- Federal funds were omitted
  - If added, cost would be \$1.88 billion
- One district was above adequacy levels
  - Another district was above adequacy levels if using federal funds

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## Major Conclusions

- According to the Education Law Center
  - Kentucky's funding level is below average and funding distribution is average
- According to *The Adequacy and Fairness of State School Finance*
  - Kentucky compares favorably to the national average based on fiscal effort
  - Still needs an extra \$4,000 per pupil to adequately fund highest poverty districts
- Based on EdBuild's funding recommendations
  - Kentucky falls short in funding add-ons

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## Major Conclusions

- Kentucky is demographically similar to West Virginia; however:
  - Kentucky performs better on NAEP than West Virginia.
  - Kentucky also spends less per-pupil
- Kentucky spends less and has lower starting teacher salaries than the national average.
- Adjusting for personal income:
  - Kentucky's K-12 current spending is more than the national average
  - Kentucky's starting teacher salaries are more than the national average

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## Data Used In This Report

- Review of national literature and adequacy studies
- National Education Association
- National Center for Education Statistics
- US Census Bureau
- The National Assessment of Educational Progress (NAEP) scores
- EdBuild Model Policies For State Education Funding
- Shanker Institute and Rutgers University Report

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## Presentation Outline

- **Define Adequacy in Kentucky**
- Cost of Adequacy Studies in Kentucky and Comparable States
- Adequacy Studies Strengths and Weaknesses
- Adequacy Outcomes
- OEA Concerns with 2014 Kentucky Model
- Alternatives to Adequacy Studies
- Major Conclusions

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## Adequate Education In Kentucky

1. Oral and written communication skills to enable students to function in a complex and rapidly changing civilization
2. Knowledge of economic, social, and political systems to enable the student to make informed choices
3. Understanding of governmental processes to enable the student to understand the issues that affect his or her community, state, and nation
4. Self-knowledge and knowledge of his or her mental and physical wellness

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## Adequate Education In Kentucky

5. Grounding in arts to enable each student to appreciate his or her cultural and historical heritage
6. Training or preparation for advanced training in either academic or vocational fields so as to enable each child to choose and pursue life work intelligently
7. Levels of academic or vocational skills to enable public school student to compete favorably with their counterparts in surrounding states, in academics or in the job market

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## Types of Adequacy Studies

- Professional Judgment
- Evidence Based
- Cost Function
- Successful Schools

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## Adequacy Studies Performed In Comparison States

State	Year	Additional Funding (\$ Millions)	Type of study
Arkansas	2003	\$847	Evidence based
	2006	220	Evidence based
	2020	n/a	Hybrid*
Kentucky	2003	740	Evidence based
	2003	1,600	Professional judgment
	2004	1,100	Professional judgment
	2014	2,440	Evidence based
North Dakota	2008	300	Evidence based
Tennessee	2004	1,114	Professional judgment

\*The 2020 Arkansas adequacy study was conducted by the House Interim and Senate Interim Education Committees who consulted with education associations, non-profits, and representatives from the Arkansas Dept. of Education. This report has elements of a professional judgment and an evidence based model and did not recommend a total dollar amount increase. The report recommended increasing the per pupil dollar amount by 2.3 percent to \$7,182 in SY 2022.

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## Professional Judgment

A panel of professionals creates a prototypical school and determines the costs of all the necessary elements needed for success.

### **Strengths**

- Easy to articulate
- Expert opinions are valuable to policymakers
- Panelists account for the special needs of students

### **Limitations**

- Cost not linked to outcomes
- Cost often overstated
- Too much subjectivity
- Not research based

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## Evidence Based

Scholars use current educational research to identify the resources a prototypical school would need in order to meet state academic standards.

### Strengths

- Based on educational research and knowledge
- Utilizes educational experts

### Limitations

- Findings outdated
- Cost not easily linked to outcomes
- Prototypical schools can lead to significantly different cost estimates
- Limited experimental study to test reform

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## Funding Adequacy and Fairness

- Education Law Center, SY 2019

Element	Grade	Rank	Kentucky	National average
Funding level	D	36	\$13,472	\$15,487
Funding distribution	D	33	Regressive	Progressive: 18 states Flat: 14 states Regressive: 15 states
Funding effort	C	19	3.6%	3.4%

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## Funding Adequacy and Fairness

- The Adequacy and Fairness of State School Finance* report, SY 2019

Element	Detail	Rank	United States
Fiscal effort	3.6%	22	3.5% national average
Funding adequacy	Below adequate	30	38 states below adequate
Progressivity	Flat	28	Progressive: 24 states Flat: 4 states Regressive: 20 states

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## Wyoming Adequacy Studies

- School funding recalibrated every 5 years based on adequacy studies
- Revenues increased \$6,000 per student
- State testing goals have not been met
- Three student performance measures actually declined

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## Kentucky and Comparable States

### FY 2020 Per Pupil Current Spending and SY 2020 NAEP Scores

State	FY 2020 Per-Pupil Spending	2020 NAEP Reading*		2020 NAEP Math*	
		4 <sup>th</sup>	8 <sup>th</sup>	4 <sup>th</sup>	8 <sup>th</sup>
Kentucky	\$11,397	35%	33%	40%	29%
Tennessee	9,896	35	32	40	31
West Virginia	12,375	30	25	30	24
Ohio	13,805	36	38	41	38

\*Percent of students at or above Proficient

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## Common Model Elements

Personnel Resources	Dollar Per Pupil Resources	Costs That Are Carried Forward
Teachers	Professional development	Transportation
Substitutes	Technology	Food service
Special student groups supports	Instructional materials	Facilities
Counselors	Formative assessments	
Nurses	Student activities	
Librarians	Athletics	
Principals/Assistant Principals	Textbooks	
Superintendents		

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## Adequacy for Excellence in Kentucky 2014 Evidence Based Model

- OEA Concerns
  - Provides funding based on resources; Kentucky uses a guaranteed base per pupil amount adjusted by add-ons
  - Cannot compare current spending to recommendations to calculate needed changes
  - Lacks supporting evidence

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## Evidence Based Model and Cost Comparison Concerns

- Student counts
- Teachers
- Special student populations
  - Students with Limited English Proficiency
  - At-risk students
  - Exceptional child students
- Nurses
- Instructional Aides and Supervisory Aides

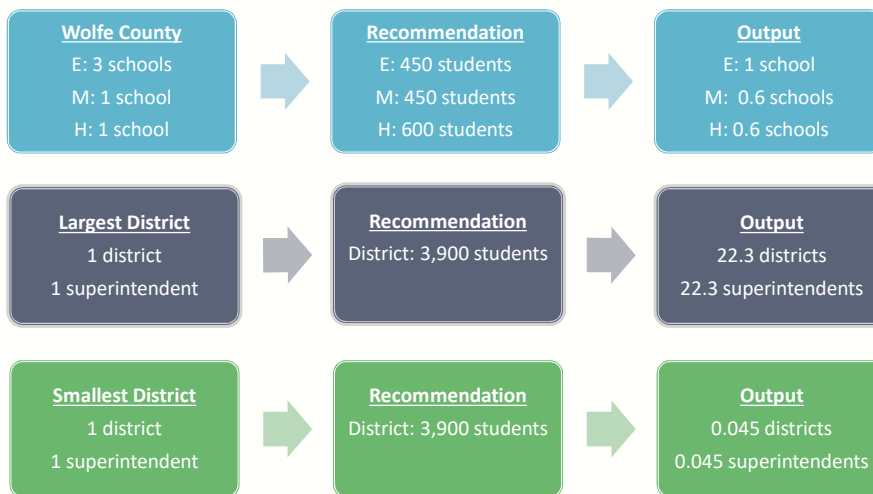
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## Evidence Based Model and Cost Comparison Concerns

- Example: Student counts
  - AADA v. ADM
  - Prototypical schools and districts
- OEA Concerns
  - Does not match practical realities in Kentucky
  - May overestimate or underestimate resources
  - Require major organization

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## Evidence Based Model and Cost Comparison Concerns



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## Evidence Based Model and Cost Comparison Concerns

- Example: At-Risk Students
- Model recommends
  - One tutor per 125 at risk students
  - One extended day teacher per 125 at risk students
  - One summer school teacher per 125 at risk students
  - Substitutes funded at 5 percent of teacher salaries
  - Six days professional development
  - \$10 per FRPL student for instructional materials
- Kentucky At-Risk Add-on Weight
  - 0.15 to the guaranteed base per pupil = \$600

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## Adequacy for Excellence in Kentucky 2014 Evidence Based Model

- OEA Concerns
  - Provides funding based on resources; Kentucky uses a guaranteed base per pupil amount adjusted by add-ons
  - Cannot compare current spending to recommendations to calculate needed changes
  - **Lacks supporting evidence**

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## Recommendations Lack Supporting Evidence

- Substitute teachers
- Librarians
- Principals and assistant principals
- School site secretaries
- Professional development
- Student activities
- Gifted and talented students
- Special student populations
- Career and technical education
- Central office, maintenance, and operations

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## Recommendations Lack Supporting Evidence

- Example: Substitutes
- Recommendation: 10 substitute days per teacher per year
- OEA Concerns:
  - Does not match actual need for substitutes in Kentucky
  - 2014 estimate: \$152.76 million
  - 2021 actual costs: \$40.7 million

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## Recommendations Lack Supporting Evidence

- Example: Gifted and Talented Program
- Model recommends \$25 per regular pupil
- Concerns:
  - No evidence linking gifted and talented programs to academic outcomes
  - Gifted and talented programs are provided to students already achieving above state standards

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## Additional Concerns

- Does not guarantee results or set timeframe
- May not fit Kentucky policy preferences
  - Example: School Resource Officers
- Carried forward costs assumed to be adequate without being evaluated
  - Example: Transportation

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## Tennessee Funding Changes

- 18 funding subcommittees:
  - District and school leaders
  - Higher education partners
  - Elected officials
  - Business leaders
  - Families
  - Education stakeholders
  - Members of the public
- Steering committee of state officials
- Governor proposed new formula
- General Assembly approves

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## Vermont Funding Changes

- 2018 - The Vermont Agency of Education (AOE) was directed by the General Assembly to undertake a study that examines and evaluates whether:
  - Modify weights for economically-disadvantaged students, English language learners (ELL), and secondary-level students;
  - new cost factors and weights should be incorporated into the equalized pupil calculation;
  - the special education census grant should be adjusted for differences in the incidence of and costs associated with SWD across school districts
- 2021 - Legislature established task force on implementation of the pupil weighting factors.
  - Made up of 4 senators and 4 representatives
  - Met 12 times from June 2021 to December 2021
- May 2022 Senate Bill 287 passed the legislature and signed by the governor

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## Nevada's At-Risk Funding Changes

- The State Board of Education and the Commission on School Funding supported changed weight for low-income students
- Infinite Campus developed new at-risk calculation
- Calculation includes 75 different student factors
  - Academic, Attendance, Behavior, and Stability
- Originally sold as re-identifying to serve more students, instead more than 200,000 students are now going to not qualify according to Educate Nevada

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## EdBuild Model Policies

### **Silver**

Somewhat less ambitious

### **Gold**

Strong and ambitious

### **Moonshot**

Breaking new ground to push further towards an ideal policy and will be complex

Only use one or two of these in funding formulas

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## EdBuild Silver Policy At-Risk Students

- Should be a generous weight
- Student counts should be directly certified based on existing state and federal programs
  - Medicaid, Supplemental Nutrition Assistance program, Temporary Assistance for Needy Families, and the food distribution program on Indian reservations
- Include categories of homeless, foster, and refugee students

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## EdBuild Gold Policy At-Risk Students

Generous weights with funding increasing base on the concentration of students. It should be higher in districts with higher concentration of students

or

Use two weights:

1. Generous weight for each disadvantaged student
2. Each disadvantaged student above a certain threshold would receive more funding

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## EdBuild Moonshot Policy At-Risk Students

Weight would be double amount of funding for regular education student

and

Use a different identification model, such as linking student address records with household income

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## Major Conclusions

- Adequacy Studies:
  - State specific
  - States always need more funding to be adequate
  - Use of prototypical schools and districts not optimal
  - Lacking how to implement resource based funding in a student based funding formula
  - Do not guarantee students reach proficiency
- Spending more doesn't always guarantee student proficiency
- There are alternatives to update funding formula without doing an adequacy study

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End