



Proposal in Regards to RFP Number: BLR – 190003 Education Adequacy Consulting Services

Submitted to the Bureau of Legislative Research, Arkansas

(This copy contains the Official Proposal Price Sheet)

James V. Shuls, Ph.D., Managing Member Shuls and Associates 1720 Briarmanor Dr. Lake Saint Louis, MO 63367 (417) 425-3086

james@shulsassociates.com

Federal Employer ID Number: 84-2853313

September 20, 2019

ATTACHMENT A OFFICIAL PROPOSAL PRICE SHEET

This OPPS is submitted by Shuls and Associates in regards to BLR – 190003.

- This bid is valid for 180 days.
- Prices in this proposal have been arrived at independently, without consultation, communication, or agreement for the purpose of restricting competition.
- No attempt has been made nor will be made by the proposer to induce any other person or firm to submit a proposal for the purpose of restricting competition.
- The person signing this proposal is authorized to represent the company and is legally responsible for the decision as to the price and supporting documentation provided as a result of this RFP.
- Prices in this proposal have not been knowingly disclosed by the proposer and will not be prior to award to any other proposer.

Shuls and Associates

Sittle with I Lobo Cittle	• • • • • • • • • • • • • • • • • • • •			
Description	Price Per Hour	Number of Hours	Number of	Price
			Positions	
James Shuls,	\$195	780	1	\$152,100
Managing				
Member				

Subcontractors

Description	Price
Office for Education Policy	\$169,176
Shaun Simms	\$90,000
Michael Ford	\$10,000
Sara Hodges	\$20,000
Matt Richmond	\$20,000
Travel Expenses	\$15,460
Other (Including copying, editing services, supplies, overhead)	\$22,500
Total Maximum Amount of Bid:	\$499,236

James V. Shuls, Ph.D.

Managing Member

Shuls and Associates (DBA Shuls Policy Consulting)

9/20/2019



September 20, 2019

Ms. Jillian Thayer Director, BLR Legal Counsel State Capitol Building **Room 315** Little Rock, AR 72201

Dear Ms. Thayer,

Please find enclosed the Shuls and Associates, LLC proposal for education adequacy consulting services as called for in the Bureau of Legislative Research's request for proposals (BLR – 190003).

Shuls and Associates is a privately-owned firm, organized for the specific purpose of seeking this contract to serve the state of Arkansas. Although the firm is new, the team I have assembled to respond to this RFP has extensive experience in public policy analysis and school finance. Combined, my associates in the Office for Education Policy at the University of Arkansas, the independent consultants on this project, and I have published more than 80 peer-reviewed journal articles in the top journals in the fields of economics, education policy, school finance, and public administration. We have authored dozens more reports, white papers, book chapters and assorted publications, made hundreds of presentations at academic conferences, seminars or in other settings. We have been invited to testify before numerous legislative bodies and have served in important roles in government or on appointed boards and committees.

With Shuls and Associates, you will get a skilled team of researchers dedicated to answering your questions with the most sophisticated methods available. You will not find any cookiecutter responses. This team was assembled specifically for this task.

In the proposal that follows, I outline our analysis plan and strategy to answering the important issues and questions raised in the RFP. I will personally lead the team to the successful completion of this endeavor.

My colleagues and I look forward to discussing in more depth how we can serve the State Legislature and the citizens of the Natural State. Do not hesitate to contact me if I can answer any questions regarding this proposal.

Regards,

James V. Shuls, Ph.D. Managing Member

Shuls and Associates

PROPOSAL SIGNATURE PAGE

Type or Print the following information:

Prospective Contractor Contact Information

Contact Person: James V. Shuls	Title: Managing Member
Phone: (417) 425-3086 Alternate Phone:	
Email: james@shulsassociates.com	
Confirmation of Redact	ted Copy
☐ YES, a redacted copy of proposal documents is enclosed.	
χ NO, a redacted copy of submission documents is <u>not</u> enclos submission documents will be released if requested.	ed. I understand a full copy of non-redacted
Note: If a redacted copy of the proposal documents is not prov box is checked a copy of the unredacted documents will be under the Arkansas Freedom of Information Act (FOIA).	
Illegal Immigrant Confi	<u>irmation</u>
By signing and submitting a response to this	RFP and by certifying online at , the Vendor agrees and certifies that
they do not employ or contract with illegal immigrants. If selection employ or contract with illegal immigrants during the aggregate	ected, the Vendor certifies that they will not
*	
Israel Boycott Restriction C	<u>Confirmation</u>
By checking the box below, the Vendor agrees and certifies the will not boycott Israel during the aggregate term of the contract	
X Vendor does not and will not boycott Israel.	
An official authorized to bind the Vendor to a resultant con	ntract shall sign below.
The Signature below signifies agreement that any exception that will cause the Vendor's proposal to be disqualified.	at conflicts with the requirements of this RFP
Authorized Signature:	itle: Managing Member
Printed/Typed Name: James V. Shuls	Date: 9/16/2019

EXECUTIVE SUMMARY

Ensuring that every child receives an adequate education is a tremendous responsibility that falls to the state's legislature. As such, it is incumbent upon state policymakers to ensure systems are in place to promote the success of all students. To this end, the Bureau of Legislative Research released a wide-ranging call for proposals regarding issues of school finance, class size, teacher recruitment, and a host of other issues. Shuls and Associates (DBA Shuls Policy Consulting) was formed with the express purpose of answering this call. By partnering with the Office for Education Policy (OEP) at the University of Arkansas and a team of highly skilled independent subcontractors, we have assembled a team uniquely qualified to answer the important questions and to serve the State of Arkansas.

For the past several decades, few firms have conducted the type of fiscal analyses requested in BLR – 190003. As a result, these firms have amassed significant experience. Our experience is quite different. Indeed, members of our team have served as expert witnesses in school finance cases. Our task has been to show how some of these firms use flawed methodologies, such as the Professional Judgement approach to determine the cost of an adequate education.

Robert Costrell, a member of the OEP's research team, for instance, has been hired by state attorneys in Washington, Missouri, and Massachusetts to provide expert witness testimony in school finance cases. In 2017, James Shuls, the managing member of Shuls and Associates, was hired by attorneys representing the State of New Mexico in the school finance case, Martinez, et al./Yazzie, et al. v. The State of New Mexico. The plaintiffs in the case were using a costing out study conducted by American Institutes for Research (AIR) to make the claim that the state was underfunding education. The study primarily utilized a professional judgement approach to estimate the cost of an adequate education. Shuls was retained by the state's attorneys to analyze the AIR report and offer expert testimony.

Shuls testimony regarding the Professional Judgement methodology, in part, led the court to conclude, the methodology "struck the Court as being one where a collective wish list was compiled and then reduced based on political reality."

In many ways, Shuls' experience in the New Mexico case led to the formation of Shuls and Associates. Shuls believes in using methodologically sound research methods to inform public policy. To that end, he created Shuls and Associates to provide rigorous analysis of education policy and school finance issues.

The Research Team

We have assembled a team of high-quality educational researchers to conduct this analysis. Below, are short bios of each of the members of the team. You will find a more detailed bio in the proposal and curriculum vitas are attached.

Shuls and Associates Key Staff

James V. Shuls, Ph.D., is the managing member of Shuls and Associates and will serve as the leader of the project. Shuls is an assistant professor of educational leadership and policy studies at the University of Missouri – St. Louis. In this capacity, he teaches courses in program evaluation, education policy analysis, and school finance. He has published in numerous peer-reviewed journals, such as the *Journal of Education Finance*, *Educational Policy*, *Education Economics*, *Social Science Quarterly*, and the *International Review of Accounting*, *Banking and Finance*. He is a former public-school teacher.

Office for Education Policy Key Staff

Opened in the fall of 2003, the Office for Education Policy (OEP) is an applied research center in the College of Education and Health Professions at the University of Arkansas. The OEP's staff includes faculty members, research associates, and graduate students who specialize in education research and policy.

The OEP's mission is to serve as a resource to Arkansas' lawmakers, educators, administrators, and other stakeholders to support them in thoughtful decision-making concerning K-12 education in the State of Arkansas. We seek to help the state's education leaders bridge the gap between research and practice by providing them with timely, actionable information and advice on current education policy issues.

The Office for Education policy will conduct the analyses on Projects 1, 2, 6, and 7, and will provide critical review on other projects. Key staff include:

Joshua B. McGee, Ph.D., will serve as the chief economist on the project. McGee is associate director of the Office for Education Policy and a research assistant professor in the Department of Education Reform at the University of Arkansas. McGee is an economist whose work focuses on evidence-based policy and public finance. His research investigates issues related to retirement policy, K–12 education, and economic development and has been published in many popular media outlets and scholarly journals.

Sarah McKenzie, Ph.D., is Executive Director of the <u>Office for Education Policy</u> at the University of Arkansas. Sarah received her PhD from the University of Arkansas in Educational Statistics and Research Methods in 2009 and was awarded a Walton Foundation Doctoral Fellowship Award.

Robert Costrell, Ph.D., is Professor of Education Reform and Economics and holds the Endowed Chair in Education Accountability at the University of Arkansas. His academic career has featured seminal publications on teacher pensions, the economic theory of educational standards, income distribution and testing, and school finance litigation. From 1999 to 2006, Dr. Costrell served in major policy roles for three governors of Massachusetts, including policy research director and chief economist, with a focus on education policy as that state's landmark reforms were implemented.

Independent Consultants

Shaun M. Simms, PMP, SA, CSSGB is a Director, Supply Chain Project Management at a Fortune 20 company. He will serve as Program Director on this evaluation. With over 10 year of experience in portfolio, program, and project management, his career project portfolio is over \$250m dollars. In 2018, he was named the Project Management Institute of Metro St. Louis "Project Leader of the Year."

Michael Ford, Ph.D., will lead Project 12 – Analysis of Waivers. Michael is an associate professor of public administration at the University of Wisconsin at Oshkosh. His research focuses on education finance policy and law, education reform, board governance, and legislative fiscal note practices.

Sara Hodges will provide general research support and data visualization. Sara is currently the Director of Data & Visualizations at EdBuild. She leads the team that analyzes large, complex datasets and turns them into compelling stories and visualizations.

Matt Richmond will provide general research support. He is currently the Chief Program Officer at EdBuild, a nonprofit focused on bringing common sense and fairness to the way states fund public schools.

Proposed Analysis Plan

The RFP calls for analyses on a wide variety of education policy and finance areas. Our first task as a team was to break these items into coherent projects. We reviewed the scope of work/specifications looking for items that were related to one another. We then grouped alike items or items that touched on similar aspects. In this manner, we broke the scope of work/specifications into 14 distinct projects.

Although we have structured this analysis plan around the 14 projects, we have paid close attention to address every point of the RFP. It should also be noted that these projects are not wholly distinct from one another. Many projects feed into other projects and all inform the overall recommendations we will make to the committee regarding school funding models.

In Table 1, we crosswalk each item in the Scope of Work/Specifications section of the RFP to our Projects. Organizing the work in this manner helps us to plan out the entire research process. Additionally, it allows us to see how the work from one project may feed into the analysis in another project. It also allows us to break down the deliverables into chunks that can be delivered at intervals throughout the grant period.

Table 1: Crosswalk with Projects and Scope of Work

		Projects and Scope of Work
Project Number	Project Name	Scope of Work/Specifications
1	Funding Formula Analysis and Recommendation	 3.0 A. 1: Recommend methods for routinely (biennially) reviewing educational adequacy. The recommendations will provide the Committees a process to follow for determining adequacy, rather than a particular dollar amount; 3.0 A. 6: Currently, the state's base-level per-student funding is determined based on a formula called the matrix, which specifies the resources (teachers, principals, central office staff, etc.) schools need and the cost of those resources. The Vendor should: a. Identify any resources school districts need that are not currently provided for through the funding formula and the cost for each; b. Identify the resources on which school districts are spending foundation funding that are not included in the state's funding formula; and c. Assess the need for such spending and recommend solutions to any problems identified;
2	Analysis of the Relationship between Funding and Performance	 3.0 A. 3: Identification of gaps in growth and achievement among student groups disaggregated by race and income and make recommendations on specific programs to address the gaps in growth or achievement; 3.0 A. 4: Analysis of correlation between deficits in student performance and deficits in funding;
3	Review of Adequacy Cost Studies	• 3.0 A. 5: Review of adequacy cost studies completed in other states and provide a report on best practices in those states;
4	Defining College and Career- Readiness	3.0 A. 7: Recommend a definition of college-readiness and/or career-readiness, including criteria for determining when students have achieved college-readiness and/or career-readiness as well as standards for determining if school districts are preparing students for college-readiness and/or career-readiness, and address the reason for the continuing need for remediation at the college level. Vendor shall include identification of career and technical programs available to students, including a recommendation for funding methods and policies for ensuring students have equitable access to these programs.
5	Class, School, and District Size Analysis	 3.0 B. 1-8: In determining the best method for providing educational adequacy to the public schools of the State of Arkansas, the Committees feel it is also imperative to include in any study by the Successful Vendor the following research analyses, including site visits to Arkansas schools, regarding the size of schools and school districts in the state: Whether local school systems currently have policies regarding the size of schools, including high schools, middle schools, elementary schools, and alternative schools; Best practices in other states regarding school and school district size; Educational and extracurricular impacts of school and school district size, and the impact, if any, on the surrounding communities and neighborhoods; Recommendations for the ideal size for high schools, middle schools, elementary schools, and alternative schools; Processes that can assist in ensuring public input into the establishment of any school size standards or guidelines; Recommendations for addressing the needs of school districts whose small size or rural geographic location limits operational efficiency; Comparison of class size requirements and student/teacher ratios in other states. In completing the comparison, the Vendor shall:

		recommend funding adjustments that adequately compensate districts for any additional costs.
6	Poverty and Proxies	 3.0 A. 2: Analysis of the effect of concentrations of poverty on the adequacy targets and whether additional adjustments are necessary to provide adequate funding for local education agencies with high concentrations of poverty; 3.0 C. 1: Evaluation of whether the number of students eligible for free and reduced price meal (FRPM) should continue to be used as a proxy for identifying economically disadvantaged students in several state education aid formulas, primarily National School Lunch (NSL) categorical funding; a. In conducting this evaluation, the Successful Vendor shall consider the federal Community Eligibility Provision that allows high-poverty schools or local education agencies (at least forty percent (40%) of their students must be directly certified as FRPM-eligible) that meet other specified criteria to participate in the program, which provides all of the students in a school with free and reduced price meals without requiring all of the students to be certified as eligible to receive the free and reduced price meals. b. The Successful Vendor shall evaluate the potential impact of this program on state aid formulas that use FRPM counts if more Arkansas schools participate in the program. c. The Successful Vendor shall also examine alternative proxies for identifying economically disadvantaged students, including those used in other states, and provide a recommendation to the state as to whether FRPM eligibility or another factor should be used to represent economically disadvantaged students in stated education aid formulas; 3.0 C. 13: Examination of funding levels to support districts or schools with high concentrations of poverty, and recommend a formula that provides increasing funding rates for districts and schools with higher proportions of economically disadvantaged students that attempts to avoid significant increases or decreases in funding for minor chang
7	Evaluating Assessment and Tax Policies	 3.0 C. 2: Examination of the way varying levels of property tax assessment and revenue affect the equitability of education resources across the state; 3.0 C. 12: Examination of the Uniform Rate of Tax funding method to include and examination of the following: a. The extent to which the URT revenue generated by each school district meets the needs of schools and affects the educational equity among districts; b. The impact of increasing URT beyond 25 mills; c. The amount of revenue school districts receive from their debt service millage that exceeds the amount the districts spend on debt service payments; and d. The growth in this excess debt service revenue and districts' use of that funding;
8	Recruitment and Staffing Policies	 3.0 C. 4: Examination of best practices in other states for attracting and retaining high quality educational and administrative staff for schools, including without limitation information regarding salaries and benefits and the funding mechanisms for those items; 3.0 C. 5: Examination of best practices regarding attracting, retaining, and compensating school nurses, including without limitation information regarding salaries and benefits and the funding mechanisms employed in other states for those items; 3.0 C. 6: Resources necessary and available for coping with student mental health issues, including best practices in other states; 3.0 C. 14: An examination of professional development and teachers' extra duty time
9	Enrollment and Facilities	3.0 C. 3: Evaluation of the impact of increasing and declining enrollments on local school systems, including transportation costs, particularly for local jurisdictions with large geographic areas but small populations, and provide

	1	1	
		•	recommendations that include the following: o a. Strategies for addressing any impacts; and o b. Changes in ADM-based funding sources (foundation funding, declining enrollment funding, and student growth) to ensure the funding is more responsive to the enrollment changes occurring in the current year. The changes should establish a threshold at which districts are held harmless for large enrollment increases during the school year; 3.0 C. 7: Study the critical capital needs of public schools in Arkansas in an effort to ensure equitable access to quality school buildings, equipment, and buses. Recommendations should ensure that state funding supports low wealth districts, districts with declining enrollments that nevertheless must replace existing buildings, and growing districts that require frequent new construction;
10	Best Practices	•	3.0 C. 8: Identifying best practices and research-based programs for the best use of poverty funds (NSL), as well as funding methodologies available and necessary for supporting students with additional needs including without limitation physical or mental disabilities, learning disabilities, behavioral issues, economic disadvantages, and English language barriers; 3.0 C. 9: Identification and examination of the practices of successful Arkansas schools, including those with large proportions of students with additional needs. The Vendor shall identify practices – financial, instructional, and otherwise – that result in the schools' high performance;
11	Fiscal Impacts of School Choice	•	3.0 C. 10: Analysis of the impact of voucher programs and tax credits on funding for public education in the state and in other states;
12	Analysis of Waivers	•	3.0 C. 11: Assessment of the impact that waivers from state requirements (statute and rules) have on the quality and cost of education, including a recommendation of policy solutions to correct any problems that may be identified;
13	Crosswalk of Picus and Odden Recommendations	•	3.0 C. 15: Comparison of the recommendations previously provided to the Committees by Allan Odden and Lawrence Picus and the policy and funding decisions implemented by the Arkansas General Assembly;
14	Convening of Educators	•	3.0 C. 16: The convening of panels of educators in the State of Arkansas, which shall occur in a variety of locations throughout the state and seek input on the needs of schools and potential solutions.

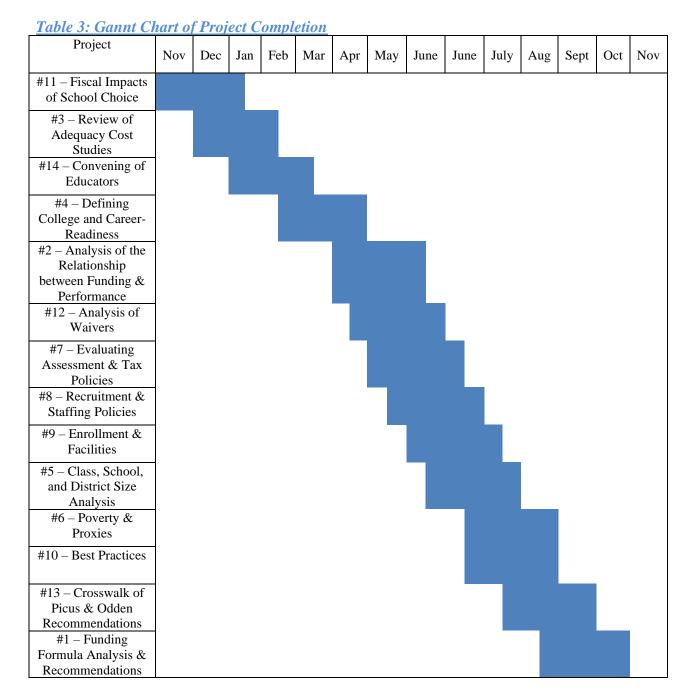
Our next task was to determine how we would analyze each project, making sure to address each point of the scope of work. Our goal is to use the most appropriate, and rigorous research methods to address the scope of work in each project.

Many of the projects will utilize literature reviews to assess best practices or the current knowledge in the field. Additionally, we will conduct many quantitative analyses. For instance, in Project 3 we will calculate school level value added measures to show how much students in each school grow, on average, over the course of a year. We will use these value-added measures in other projects as well. Our analysis will also rely on surveys and qualitative approaches, such as interviews and focus groups with educators. We will also utilize agency records and other government documents to address many items in the scope of work. When appropriate, we will also conduct geospatial mapping or use other tools for data visualization. In Table 2, we show which methods will be used to address each item in the scope of work.

Table 2: Overview of Analysis Plan

Table 2: Ove	rview oj	Analysis	<u>Plan</u>	I	1	I	ъ .	G : 1
Scope of Work/ Specifications	Project	Literature Review	Quantitative Analysis	Interviews	Focus Groups	Survey	Review of Agency Records	Geospatial Mapping or Data Visualization
3.0 A.1	1	•			♦	♦	•	
3.0 A.2	6		•					•
3.0 A.3	2		•					
3.0 A.4	2		•					
3.0 A.5	3	•						
3.0 A.6	1	♦			•	•	•	
3.0 A.7	4	♦	•		•	♦		•
3.0 B.1	5					♦		
3.0 B.2	5	♦						
3.0 B.3	5		•			•		
3.0 B.4	5	•						
3.0 B.5	5	•						
3.0 B.6	5	*						
3.0 B.7	5		*				•	•
3.0 B.8	5	•	*					
3.0 C.1	6	•	*					
3.0 C.2	7		*				•	
3.0 C.3	9	•	*				•	
3.0 C.4	8	•	•					
3.0 C.5	8	•	•					
3.0 C.6	8	•		♦		•		
3.0 C.7	9							
3.0 C.8	10	•						
3.0 C.9	10			♦				
3.0 C.10	11		•					
3.0 C.11	12		•				•	
3.0 C.12	7		•	♦				
3.0 C.13	6	•	♦					
3.0 C.14	8			♦		•		
3.0 C.15	13						•	
3.0 C.16	14				•	•		

If we are awarded the grant, we anticipate beginning work in November 2019 and being finished by November 2020. In Table 3, we present a Gannt chart of project completion. We organized the sequence of our analyses to build upon one another. For instance, we plan to conduct Project 14, our focus groups and surveys of educators, early in our process. We do this strategically, because we know the responses in these sessions will be informative for much of the work we conduct later in the process.



Summary

Together, Shuls and Associates (DBA Shuls Policy Consulting), the Office for Education Policy, and our independent consultants, have assembled a team that is uniquely qualified to address the scope of work in BLR - 190003. We are experienced researchers, with significant experience in conducting education policy and fiscal analyses.

Table of Contents SECTION 3: EDUCATION ADEQUACY CONSULTING SERVICES 4 Analysis Plan4 Shuls and Associates 24 5.5 Vendor's Qualifications 27 Plan for Assisting the Committees 28

Ind	dependent Consultants3	31
Org	rganizational chart of the project	33
SECTIO	ON 6: EVALUATION CRITERIA FOR SELECTION	34

SECTION 1. GENERAL INFORMATION

I, James V. Shuls, managing member of Shuls and Associates, acknowledge and agree with the requirements set forth in the following sections:

- 1. 0 Introduction
- 1.1 Issuing Agency
- 1.2 Schedule of Events
- 1.3 Caution to Vendors
- 1.4 RFP Format
- 1.5 Requirement of Amendment
- 1.6 Alteration of Original RFP Documents
- 1.7 RFP Questions
- 1.8 Sealed Prices/Cost
- 1.9 Proprietary Information
- 1.10 Delivery of Response Documents
- 1.11 Bid Evaluation
- 1.12 Oral and/or Written Presentations/Demonstrations
- 1.13 Intent to Award
- 1.14 Appeals
- 1.15 Past Performance
- 1.16 Type of Contract
- 1.17 Payment and Invoice Provisions
- 1.18 Prime Contractor Responsibility
- 1.19 Delegation and/or Assignment
- 1.20 Conditions of Contract
- 1.21 Statement of Liability
- 1.22 Award Responsibility
- 1.23 Independent Price Determination
- 1.24 Publicity
- 1.25 Confidentiality
- 1.26 Proposal Tenure
- 1.27 Warranties
- 1.28 Contract Termination
- 1.29 Vendor Qualifications
- 1.30 Negotiations
- 1.31 Licenses and Permits
- 1.32 Ownership of Materials & Copyright

The following sections will be addressed in further depth elsewhere in the proposal:

- 1.8 Sealed Prices/Cost Addressed in the Official Proposal Price Sheet
- 1.15 Past Performance Addressed in the Vendor Profile
- 1.27 Warranties Addressed in the Vendor Profile
- 1.29 Vendor Qualifications Addressed in the Vendor Profile

SECTION 2: OVERVIEW

I, James V. Shuls, managing member of Shuls and Associates, acknowledge and agree with the requirements set forth in the following section:

2.0 Objectives

It is the intention of Shuls and Associates to enter into a contract for education adequacy consulting services, in order to provide the members of the Arkansas General Assembly with detailed and accurate information concerning the current efficacy of the biennial adequacy study and evaluation undertaken by the Committees, and to provide the Committees with recommendations regarding reform or replacement of the current methods for determining educational adequacy in the State of Arkansas.

To fulfil this stated purpose, Shuls and Associates will use the following definition of "educational adequacy," as stated in the RFP, to serve as a basis for identifying resources required for Adequacy:

- The standards included in the state's curriculum frameworks, which define what all
 Arkansas students are to be taught, including specific grade-level curriculum and a
 mandatory thirty-eight (38) Carnegie units defined by the Arkansas Standards of
 Accreditation to be taught at the high school level, and opportunities for students to
 develop career-readiness skills;
- The standards included in the state's testing system. The goal is to have all, or all but the most severely disabled, students perform at or above proficiency on these tests; and
- Sufficient funding to provide adequate resources as identified by the General Assembly.

In the following section, I will present our Analysis Plan to address the specific scope of the work requested in the RFP.

SECTION 3: EDUCATION ADEQUACY CONSULTING SERVICES

In this section, I will specifically address all the requirements set forth in sections 3.0 A, 3.0 B, and 3.0 C of the RFP. Similarly, I specifically address section 3.1. Section 3.2 Procurement of Goods and Services is not addressed explicitly, however, I, James V. Shuls, managing member of Shuls and Associates, acknowledge and agree with the requirements set forth therein.

3.0 Scope of Work/Specifications

Analysis Plan

The RFP calls for an analysis of many different facets of Arkansas' education system, including school funding, staffing policies, class sizes, and school choice. While many of the points in the scope of work are connected, others are distinct from one another. After an initial analysis by our team, we have divided the work requested in the RFP into 14 distinct projects. That is, we have grouped tasks on related matters. Below, we list each project. Although we have structured this

analysis plan around the 14 projects, we have paid close attention to address every point of the RFP. It should also be noted that these projects are not wholly distinct from one another. Many projects feed into other projects and all inform the overall recommendations we will make to the committee regarding school funding models.

Table 1: Crosswalk with Projects and Scope of Work

Project Number	Project Name	Scope of Work/Specifications
1	Funding Formula Analysis and Recommendation	 3.0 A. 1: Recommend methods for routinely (biennially) reviewing educational adequacy. The recommendations will provide the Committees a process to follow for determining adequacy, rather than a particular dollar amount; 3.0 A. 6: Currently, the state's base-level per-student funding is determined based on a formula called the matrix, which specifies the resources (teachers, principals, central office staff, etc.) schools need and the cost of those resources. The Vendor should: a. Identify any resources school districts need that are not currently provided for through the funding formula and the cost for each; b. Identify the resources on which school districts are spending foundation funding that are not included in the state's funding formula; and c. Assess the need for such spending and recommend solutions to any problems identified;
2	Analysis of the Relationship between Funding and Performance	 3.0 A. 3: Identification of gaps in growth and achievement among student groups disaggregated by race and income and make recommendations on specific programs to address the gaps in growth or achievement; 3.0 A. 4: Analysis of correlation between deficits in student performance and deficits in funding;
3	Review of Adequacy Cost Studies	3.0 A. 5: Review of adequacy cost studies completed in other states and provide a report on best practices in those states;
4	Defining College and Career-Readiness	3.0 A. 7: Recommend a definition of college-readiness and/or career-readiness, including criteria for determining when students have achieved college-readiness and/or career-readiness as well as standards for determining if school districts are preparing students for college-readiness and/or career-readiness, and address the reason for the continuing need for remediation at the college level. Vendor shall include identification of career and technical programs available to students, including a recommendation for funding methods and policies for ensuring students have equitable access to these programs.
5	Class, School, and District Size Analysis	3.0 B. 1-8: In determining the best method for providing educational adequacy to the public schools of the State of Arkansas, the Committees feel it is also imperative to include in any study by the Successful Vendor the following research analyses, including site visits to Arkansas schools, regarding the size of schools and school districts in the state: 1. Whether local school systems currently have policies regarding the size of schools, including high schools, middle schools, elementary schools, and alternative schools; 2. Best practices in other states regarding school and school district size; 3. Educational and extracurricular impacts of school and school district size, and the impact, if any, on the surrounding communities and neighborhoods; 4. Recommendations for the ideal size for high schools, middle schools, elementary schools, and alternative schools; 5. Processes that can assist in ensuring public input into the

	1		
			establishment of any school size standards or guidelines; 6. Recommendations for addressing the needs of school districts whose small size or rural geographic location limits operational efficiency; 7. Comparison of class size requirements and student/teacher ratios in other states. In completing the comparison, the Vendor shall:
6	Poverty and Proxies	•	3.0 A. 2: Analysis of the effect of concentrations of poverty on the adequacy targets and whether additional adjustments are necessary to provide adequate funding for local education agencies with high concentrations of poverty; 3.0 C. 1: Evaluation of whether the number of students eligible for free and reduced price meal (FRPM) should continue to be used as a proxy for identifying economically disadvantaged students in several state
		•	education aid formulas, primarily National School Lunch (NSL) categorical funding; a. In conducting this evaluation, the Successful Vendor shall consider the federal Community Eligibility Provision that allows high-poverty schools or local education agencies (at least forty percent (40%) of their students must be directly certified as FRPM-eligible) that meet other specified criteria to participate in the program, which provides all of the students in a school with free and reduced price meals without requiring all of the students to be certified as eligible to receive the free and reduced price meals. b. The Successful Vendor shall evaluate the potential impact of this program on state aid formulas that use FRPM counts if more Arkansas schools participate in the program. c. The Successful Vendor shall also examine alternative proxies for identifying economically disadvantaged students, including those used in other states, and provide a recommendation to the state as to whether FRPM eligibility or another factor should be used to represent economically disadvantaged students in stated education aid formulas; 3.0 C. 13: Examination of funding levels to support districts or schools with high concentrations of poverty, and recommend a formula that provides increasing funding rates for districts and schools with higher proportions of economically disadvantaged students that attempts to avoid significant increases or decreases in funding for minor changes in concentrations of poverty;
7	Evaluating Assessment and Tax Policies	•	3.0 C. 2: Examination of the way varying levels of property tax assessment and revenue affect the equitability of education resources across the state;
		•	 3.0 C. 12: Examination of the Uniform Rate of Tax funding method to include and examination of the following: a. The extent to which the URT revenue generated by each school district meets the needs of schools and affects the educational equity among districts; b. The impact of increasing URT beyond 25 mills; c. The amount of revenue school districts receive from their debt service millage that exceeds the amount the districts spend on debt service payments; and d. The growth in this excess debt service revenue and districts' use of that funding;
8	Recruitment and	•	3.0 C. 4: Examination of best practices in other states for attracting and

	Staffing Policies	 retaining high quality educational and administrative staff for schools, including without limitation information regarding salaries and benefits and the funding mechanisms for those items; 3.0 C. 5: Examination of best practices regarding attracting, retaining, and compensating school nurses, including without limitation information regarding salaries and benefits and the funding mechanisms employed in other states for those items; 3.0 C. 6: Resources necessary and available for coping with student mental health issues, including best practices in other states; 3.0 C. 14: An examination of professional development and teachers' extra duty time
9	Enrollment and Facilities	 3.0 C. 3: Evaluation of the impact of increasing and declining enrollments on local school systems, including transportation costs, particularly for local jurisdictions with large geographic areas but small populations, and provide recommendations that include the following: a. Strategies for addressing any impacts; and b. Changes in ADM-based funding sources (foundation funding, declining enrollment funding, and student growth) to ensure the funding is more responsive to the enrollment changes occurring in the current year. The changes should establish a threshold at which districts are held harmless for large enrollment increases during the school year; 3.0 C. 7: Study the critical capital needs of public schools in Arkansas in an effort to ensure equitable access to quality school buildings, equipment, and buses. Recommendations should ensure that state funding supports low wealth districts, districts with declining enrollments that nevertheless must replace existing buildings, and growing districts that require frequent new construction;
10	Best Practices	 3.0 C. 8: Identifying best practices and research-based programs for the best use of poverty funds (NSL), as well as funding methodologies available and necessary for supporting students with additional needs including without limitation physical or mental disabilities, learning disabilities, behavioral issues, economic disadvantages, and English language barriers; 3.0 C. 9: Identification and examination of the practices of successful Arkansas schools, including those with large proportions of students with additional needs. The Vendor shall identify practices – financial, instructional, and otherwise – that result in the schools' high performance;
11	Fiscal Impacts of School Choice	• 3.0 C. 10: Analysis of the impact of voucher programs and tax credits on funding for public education in the state and in other states;
12	Analysis of Waivers	• 3.0 C. 11: Assessment of the impact that waivers from state requirements (statute and rules) have on the quality and cost of education, including a recommendation of policy solutions to correct any problems that may be identified;
13	Crosswalk of Picus and Odden Recommendations	• 3.0 C. 15: Comparison of the recommendations previously provided to the Committees by Allan Odden and Lawrence Picus and the policy and funding decisions implemented by the Arkansas General Assembly;
14	Convening of Educators	• 3.0 C. 16: The convening of panels of educators in the State of Arkansas, which shall occur in a variety of locations throughout the state and seek input on the needs of schools and potential solutions.

Table 2: Overview of Analysis Plan

Scope of Work/ Specifications	Project	Literature Review	Quantitative Analysis	Interviews	Focus Groups	Survey	Review of Agency Records	Geospatial Mapping or Data Visualization
3.0 A.1	1	•			•	♦	•	
3.0 A.2	6		•					•
3.0 A.3	2		•					
3.0 A.4	2		•					
3.0 A.5	3	♦						
3.0 A.6	1	♦			•	♦	♦	
3.0 A.7	4	•	•		•	♦		•
3.0 B.1	5					♦		
3.0 B.2	5	♦						
3.0 B.3	5		•			♦		
3.0 B.4	5	•						
3.0 B.5	5	•						
3.0 B.6	5	•						
3.0 B.7	5		•				•	•
3.0 B.8	5	•	•					
3.0 C.1	6	•	•					
3.0 C.2	7		•				•	
3.0 C.3	9	•	•				•	
3.0 C.4	8	•	•					
3.0 C.5	8	•	•					
3.0 C.6	8	•		•		♦		
3.0 C.7	9							
3.0 C.8	10	•						
3.0 C.9	10			•				
3.0 C.10	11		♦					
3.0 C.11	12		♦				•	
3.0 C.12	7		♦	•				
3.0 C.13	6	•	•					
3.0 C.14	8			•		•		
3.0 C.15	13						•	
3.0 C.16	14				•	•		

Project 1: Funding Formula Analysis and Recommendation

Scope of Work/Specifications Addressed:

- 3.0 A. 1: Recommend methods for routinely (biennially) reviewing educational adequacy. The recommendations will provide the Committees a process to follow for determining adequacy, rather than a particular dollar amount;
- 3.0 A. 6: Currently, the state's base-level per-student funding is determined based on a formula called the matrix, which specifies the resources (teachers, principals, central office staff, etc.) schools need and the cost of those resources. The Vendor should:
 - a. Identify any resources school districts need that are not currently provided for through the funding formula and the cost for each;
 - b. Identify the resources on which school districts are spending foundation funding that are not included in the state's funding formula; and
 - c. Assess the need for such spending and recommend solutions to any problems identified;

Proposed Analysis Plan:

This project will consist of the following:

- A survey of administrators
- Literature reviews
- An analysis of budget documents (agency records).

Arkansas biennially reviews education adequacy and adjusts the funding formula. The RFP calls for recommendations for a process to determine adequacy, rather than a specific dollar amount. Additionally, the RFP requests an analysis of the effect of concentrations of poverty on adequacy targets and whether additional adjustments are necessary to provide adequacy funding for local education agencies. Currently, base level funding is determined on a formula called the matrix. The matrix is a resource cost model. The RFP asks the vendor to identify resources not currently on the matrix and for recommendations to the funding formula.

We view this project as the culmination of the analysis plan. Ultimately, this project will offer suggestions about how the state should fund public schools. Thus, this project will be informed by the work undertaken in the other projects. That work will be supplemented by additional analyses in order to provide robust recommendations to the committee in terms of the state's determination of adequacy and the structure of the state's funding formula (3.0 A. 1).

In addition to relying on the work from other projects, we will conduct an analysis budgets (agency records) from a random sample of Arkansas school districts (3.0 A. 6). This sample will be stratified, to ensure school districts from every region and of various sizes are included in the sample. In the review of the budgets, we will examine where school districts spend their resources and whether those expenditures are outside of the current items on the matrix. Additionally, we will conduct a survey of school level administrators and a review of the related literature on school funding. This will include an examination of how other states currently fund public education.

Through the budget analysis and the survey, we will identify resources that school districts need, but are not receiving funds for and things that districts are spending foundation funds on that are not currently in the matrix. This work will also be informed by the focus groups conducted in Project 14 of this proposal.

Project 2: Analysis of the Relationship between Funding and Performance

Scope of Work/Specifications Addressed:

- 3.0 A. 3: Identification of gaps in growth and achievement among student groups disaggregated by race and income and make recommendations on specific programs to address the gaps in growth or achievement;
- 3.0 A. 4: Analysis of correlation between deficits in student performance and deficits in funding;

Proposed Analysis Plan:

This project will consist of the following:

- A quantitative analysis of student performance
- Data visualization

The RFP calls for an examination of gaps in growth and achievement among student groups, disaggregated by race and income. Additionally, the RFP asks for an analysis of the correlation between student performance and funding. Importantly, the state is seeking strategies for ameliorating gaps in growth and achievement.

Using a longitudinal dataset of student performance, we will calculate a school level value added measure (VAM) (3.0 A. 3). This measure will show how much students in each school grow, on average, over the course of year. When the data permits, we will create VAM measures of student subgroups. Using this growth measure and the state's achievement measure, we will analyze the correlation between growth, performance, and school district finances (3.0 A. 4). We will display the results of our analysis using a variety of data visualization strategies, such as maps to display the relative performance of each school district.

Using this information and information gathered from the research literature, we will investigate the extent to which and how funding can be a tool for closing the achievement gap.

Project 3: Review of Adequacy Cost Studies

Scope of Work/Specifications Addressed:

• 3.0 A. 5: Review of adequacy cost studies completed in other states and provide a report on best practices in those states;

Proposed Analysis Plan:

This project will consist of the following:

• A literature review and analysis of adequacy cost studies

The RFP calls for a review of adequacy cost studies completed in other states and asks for the vendor to provide a report based on best practices in those states.

We will conduct a systematic literature review of adequacy cost studies. Most of these analyses have not been published in academic journals and some are not readily available. We will cull all publicly available studies from online sources, such as the websites of the authors of the studies. In our analysis, we will describe the different types of costing out strategies used, such as the professional judgement model or the successful schools approach. We will discuss the relative trade-offs of each of these approaches. We will also synthesize the findings and main conclusions of all these studies.

Project 4: Defining College and Career-Readiness

Scope of Work/Specifications Addressed:

• 3.0 A. 7: Recommend a definition of college-readiness and/or career-readiness, including criteria for determining when students have achieved college-readiness and/or career-readiness as well as standards for determining if school districts are preparing students for college-readiness and/or career-readiness, and address the reason for the continuing need for remediation at the college level. Vendor shall include identification of career and technical programs available to students, including a recommendation for funding methods and policies for ensuring students have equitable access to these programs.

Proposed Analysis Plan:

This project will consist of the following:

- A literature review regarding definitions of college- and career-readiness
- A quantitative analysis of student success metrics
- A survey of administrators
- Geospatial mapping of programs
- This project will also be informed by the focus groups and survey conducted in Project 14.

The RFP asks for the vendor to recommend a definition of college-readiness and/or career-readiness. With this definition in mind, the vendor is to develop standards to determining whether school districts are preparing students for college- and/or career readiness. Additionally, the vendor is to identify what career and technical education programs are currently available to students. The state seeks funding and policy recommendations to improve equitable access to these programs.

To determine an effective definition of college- and career-readiness, we will first conduct a literature review. Additionally, we will review the data collected in the survey and focus groups conducted with educators in Project 14. From this, we will develop a working definition of college and career-readiness for Arkansas.

We will then conduct a descriptive analysis of student success metrics. In this analysis, we will compare Arkansas to other states (specifically the SREB states) on measures such as ACT scores, high school graduation, percent passing AP exams, and college remediation rates. Additionally, we will examine college enrollment and attainment metrics using national student

clearinghouse data. In addition to these college-readiness measures, we will examine career and technical certifications.

To better understand what programs are currently available to students, we will survey school administrators and review state administrative data. This will allow us to create a list of programs available for students and the location of these programs. We will also examine the patterns of CTE course taking using administrative data from the Arkansas Department of Education. Using this information, we will create geospatial maps to visually display student access to career and technical programs.

Project 5: Class, School, and District Size Analysis

Scope of Work/Specifications Addressed:

- 3.0 B.: In determining the best method for providing educational adequacy to the public schools of the State of Arkansas, the Committees feel it is also imperative to include in any study by the Successful Vendor the following research analyses, including site visits to Arkansas schools, regarding the size of schools and school districts in the state:
- 3.0 B. 1. Whether local school systems currently have policies regarding the size of schools, including high schools, middle schools, elementary schools, and alternative schools;
- 3.0 B. 2. Best practices in other states regarding school and school district size;
- 3.0 B. 3. Educational and extracurricular impacts of school and school district size, and the impact, if any, on the surrounding communities and neighborhoods;
- 3.0 B. 4. Recommendations for the ideal size for high schools, middle schools, elementary schools, and alternative schools;
- 3.0 B. 5. Processes that can assist in ensuring public input into the establishment of any school size standards or guidelines;
- 3.0 B. 6. Recommendations for addressing the needs of school districts whose small size or rural geographic location limits operational efficiency;
- 3.0 B. 7. Comparison of class size requirements and student/teacher ratios in other states. In completing the comparison, the Vendor shall:
 - a. Assess the variations in class sizes and instructional staffing levels in Arkansas schools and their impact on teacher salaries; and
 - b. Address why salary disparities exist; and
- 3.0 B. 8. Assess and recommend criteria to be used for identifying isolated schools or isolated school districts. Assess the cost implications of school isolation and recommend funding adjustments that adequately compensate districts for any additional costs.

Proposed Analysis Plan:

This project will consist of the following:

- A survey of central office personnel regarding district class-size policies and availability of extracurricular activities,
- A literature review on best practices regarding class size
- A descriptive analysis of class size policies in other states
- A quantitative analysis of the relationship between size and salaries
- Data visualization

There is much concern about how the number of students in a class and in a school or district impacts learning and extracurricular activities. To better understand these issues, the RFP calls for an analysis of current district class size policies, an examination of best practices in other states, an analysis of the impact of class size on extracurricular activities, an analysis of class-size requirements and student/teacher rations in other states and the impact of these issues on teacher salaries. The committee is particularly interested in how these issues might be addressed in isolated school districts.

Our team will conduct a robust literature review to identify best practices in other states regarding school and school districts size (3.0 B. 2), to provide recommendations for the ideal size of schools (3.0 B. 4), and to identify criteria that may be used for identifying isolated schools or school districts (3.0 B. 8). This review and our other research will be used to develop a process that can be used to solicit public input into the establishment of any school size standards or guidelines (3.0 B. 5). The literature review will also be used in the development of recommendations for addressing the needs of school districts whose small size or rural geographic location limits operational efficiency (3.0 B. 6).

Additionally, our team will survey central office personnel to determine the current class and school size policies of districts within the state (3.0 B. 1). This will allow us to draft a descriptive report on the current state of class and school size policies. We will also conduct a descriptive analysis of class size policies in neighboring and SREB states. In the survey, we will also solicit information regarding academic and non-academic extracurricular activities (3.0 B. 3). We will also obtain data from the Arkansas Activities Association regarding sport offerings in each school district. With this information, we analyze the relationship between school and district size and offerings of various extracurricular activities.

Using data from the Arkansas Department of Education, we will conduct a quantitative analysis of the relationship between class sizes and teacher salaries, providing a detailed analysis and data visualizations by each region of the state (3.0 B. 7). This analysis will also include an analysis of school districts listed by the Arkansas Department of Education as having a geographic teacher shortage. Using school finance data, school descriptive characteristics, and community characteristics, we will estimate the factors which explain variation in teacher salaries. Using data from the National Center for Education Statistics, we will conduct a descriptive analysis of current student/teacher ratios across the country. We will also review agency records of other states to determine state requirements.

Our analysis will provide suggestions, as well as trade-offs to consider, when drafting state class size requirements. For any suggestions we make to the funding formula, we will provide a fiscal analysis of the funding adjustment (3.0 B. 8).

Project 6: Poverty and Proxies

Scope of Work/Specifications Addressed:

• 3.0 A. 2: Analysis of the effect of concentrations of poverty on the adequacy targets and whether additional adjustments are necessary to provide adequate funding for local education agencies with high concentrations of poverty;

- 3.0 C. 1: Evaluation of whether the number of students eligible for free and reduced-price meal (FRPM) should continue to be used as a proxy for identifying economically disadvantaged students in several state education aid formulas, primarily National School Lunch (NSL) categorical funding;
 - a. In conducting this evaluation, the Successful Vendor shall consider the federal Community Eligibility Provision that allows high-poverty schools or local education agencies (at least forty percent (40%) of their students must be directly certified as FRPM-eligible) that meet other specified criteria to participate in the program, which provides all of the students in a school with free and reduced price meals without requiring all of the students to be certified as eligible to receive the free and reduced price meals.
 - b. The Successful Vendor shall evaluate the potential impact of this program on state aid formulas that use FRPM counts if more Arkansas schools participate in the program.
 - c. The Successful Vendor shall also examine alternative proxies for identifying economically disadvantaged students, including those used in other states, and provide a recommendation to the state as to whether FRPM eligibility or another factor should be used to represent economically disadvantaged students in stated education aid formulas;
- 3.0 C. 13: Examination of funding levels to support districts or schools with high
 concentrations of poverty, and recommend a formula that provides increasing funding rates
 for districts and schools with higher proportions of economically disadvantaged students that
 attempts to avoid significant increases or decreases in funding for minor changes in
 concentrations of poverty;

Proposed Analysis Plan:

This project will consist of the following:

- A review of FRPM and other proxies for poverty
- A quantitative analysis of changes to FRPM participation
- A quantitative analysis of current funding levels

Student eligibility for free and reduced-price meals (FRPM) has traditionally been used as a measure of poverty in many states. Increasingly, however, there is a question as to whether this is a useful proxy. With the advent of community eligibility rules, many communities no longer collect FRPM information from students. For this and a variety of reasons, it is reasonable to examine whether FRMP remains a useful proxy for poverty and a worthwhile mechanism for distributing funding.

Using our value-added estimates from Project 2 and data from the Arkansas Department of Education, we will analyze the relationship between the percentage of students who qualify for free or reduced-price meals (3.0 A. 2). In this analysis we will examine the relationship between poverty (as measured by FRPM) and expenditures; as well as the relationship between poverty and achievement.

Using a time series of data, pre-and post-Community Eligibility Provision rules, we will examine how the provision is affecting reported FRPM rates in Arkansas (3.0 C. 1). We will then investigate whether there are better poverty measures that could be used in the funding formula. For any proposed poverty measure, we will examine the fiscal impact on state aid formulas.

Additionally, we will review policies in other states and provide a descriptive analysis of their measures of poverty.

Using the information obtained from these analyses and a literature review, we will make recommendations for providing state aid to school districts with varying rates of poverty (3.0 C. 13).

Project 7: Evaluating Assessment and Tax Policies

Scope of Work/Specifications Addressed:

- 3.0 C. 2: Examination of the way varying levels of property tax assessment and revenue affect the equitability of education resources across the state;
- 3.0 C. 12: Examination of the Uniform Rate of Tax funding method to include and examination of the following:
 - a. The extent to which the URT revenue generated by each school district meets the needs of schools and affects the educational equity among districts;
 - b. The impact of increasing URT beyond 25 mills;
 - c. The amount of revenue school districts receive from their debt service millage that exceeds the amount the districts spend on debt service payments; and
 - d. The growth in this excess debt service revenue and districts' use of that funding;

Proposed Analysis Plan:

This project will consist of the following:

- A descriptive analysis of assessment practices (agency records)
- A quantitative analysis of property assessment
- A quantitative analysis of Uniform Rate of Tax policies
- A quantitative analysis of debt service revenue and expenditures
- Interviews with district personnel

School funding is significantly impacted by assessment practices and tax policy. As such, it is important to understand how current Arkansas policies are impacting the state's public schools. First, we will analyze agency records to describe how various types of property (agricultural, residential, and commercial) are assessed in Arkansas (3.0 C. 2). We will then explore in a descriptive, quantitative analysis how these assessment practices impact school funding, especially as it relates to equity.

Arkansas currently has a Uniform Rate of Tax (URT) of 25 mills. This is a constitutionally required tax rate. To analyze Arkansas' URT and other millage rates, we will obtain longitudinal financial records for each school district from the Arkansas Department of Education (3.0 C. 12). Using these data, we will answer three primary questions: (1) What would be the impact of increasing the URT beyond 25 mills, (2) How much revenue do school districts receive via their debt service millage that exceeds their debt payments? On this second question, we will examine this phenomenon over a period of time. We will also use these data to examine the impact of the URT and tax policy on school funding equity.

Once we identify which school districts receive an excess amount of funds from their debt service millage, we will select a sample of school districts for follow-up interviews. In these targeted school districts, we will interview either the superintendent or the CFO regarding the use of excess debt service revenue to determine how these funds are being spent.

Project 8: Recruitment and Staffing Policies

Scope of Work/Specifications Addressed:

- 3.0 C. 4: Examination of best practices in other states for attracting and retaining high quality educational and administrative staff for schools, including without limitation information regarding salaries and benefits and the funding mechanisms for those items;
- 3.0 C. 5: Examination of best practices regarding attracting, retaining, and compensating school nurses, including without limitation information regarding salaries and benefits and the funding mechanisms employed in other states for those items;
- 3.0 C. 6: Resources necessary and available for coping with student mental health issues, including best practices in other states;
- 3.0 C. 14: An examination of professional development and teachers' extra duty time

Proposed Analysis Plan:

This project will consist of the following:

- A quantitative analysis of certifications
- A literature review of best practices
- A survey of counseling, student service professionals, and/or human resources professionals
- Interviews with education professionals

Schools are only as good as the people in them. As such, the RFP calls for an analysis of recruitment and staffing policies. The goal is to determine which policies are most effective at helping the state recruit and retain high quality educators, administrators, and nurses. Part of retention is making sure educators are equipped to handle the challenges of the job. Therefore, the RFP calls for an examination of the resources necessary and available for coping with student mental health issues and issues related to teacher professional development.

First, we will conduct a quantitative, descriptive analysis of Arkansas current educator, leader, and nurse pipeline. Using data from the Arkansas Department of Education and the Arkansas Department of Higher Education, we will examine the current enrollment, graduation, and certification trends of Arkansas educators. This will allow us to determine where gaps may exist in the current pipeline of educators, leaders, and nurses.

Next, we will conduct an exhaustive literature review to determine which polices and practices help states and school districts attract and retain teachers (3.0 C. 4 & 3.0 C. 5). Special attention will be made to identify policies that are effective when implemented in contexts similar to those of Arkansas' public schools. In this manner, we will develop policy suggestions for the development of a recruitment pipeline for Arkansas public schools.

In addition to conducting a literature review regarding best practices for coping with student mental health issues, we will survey counselors, student service professionals, and/or human

resources professionals to determine what supports are in place for students and teachers to deal with student mental health issues as they may arise (3.0 C. 6). In the survey, we will also ask questions related to school district policies and practices regarding teacher professional development and professional duty time (3.0 C. 14). After the survey, we will conduct follow up interviews with a subset of education professionals to discuss issues related to student mental health issues and teacher professional development.

Project 9: Enrollment and Facilities

Scope of Work/Specifications Addressed:

- 3.0 C. 3: Evaluation of the impact of increasing and declining enrollments on local school systems, including transportation costs, particularly for local jurisdictions with large geographic areas but small populations, and provide recommendations that include the following:
 - a. Strategies for addressing any impacts; and
 - b. Changes in ADM-based funding sources (foundation funding, declining enrollment funding, and student growth) to ensure the funding is more responsive to the enrollment changes occurring in the current year. The changes should establish a threshold at which districts are held harmless for large enrollment increases during the school year;
- 3.0 C. 7: Study the critical capital needs of public schools in Arkansas in an effort to ensure equitable access to quality school buildings, equipment, and buses. Recommendations should ensure that state funding supports low wealth districts, districts with declining enrollments that nevertheless must replace existing buildings, and growing districts that require frequent new construction;

Proposed Analysis Plan:

This project will consist of the following:

- A literature review
- A quantitative analysis
- A review of state policies (agency records)

Within a state, it is quite common for some school districts to experience rapid growth while other school districts are seeing significant declines in enrollment. As such, state policies must be cognizant of the varying realities faced by school districts. The RFP calls for an evaluation of the impact of increasing and declining enrollments on school systems.

First, we will conduct a literature review on the impacts of enrollment changes on school district finances (3.0 C.3). Specifically, we will review how schools respond in times of change and which types of costs tend to be variable or fixed (at least in the short-run). Additionally, we will analyze the relationship between enrollment patterns and various aspects of school finance using longitudinal data from the Arkansas Department of Education.

The literature review and our analysis will allow us to provide the state with strategies for addressing issues related to increasing or declining enrollment. Additionally, we will examine Arkansas' current practices for using average daily membership (ADM) in funding decisions. This work will be informed by a review of policies in other states regarding enrollment changes.

Using the National Center for Education Statistics' "Condition of America's Public School Facilities" as a guide, we will develop a survey for school administrators regarding school conditions (3.0 C. 7). With this and the information gleaned from our literature review and our quantitative analysis of enrollment patterns, we will offer recommendations to ensure state funding is targeted to meet the needs of individual school districts.

Project 10: Best Practices

Scope of Work/Specifications Addressed:

- 3.0 C. 8: Identifying best practices and research-based programs for the best use of poverty funds (NSL), as well as funding methodologies available and necessary for supporting students with additional needs including without limitation physical or mental disabilities, learning disabilities, behavioral issues, economic disadvantages, and English language barriers;
- 3.0 C. 9: Identification and examination of the practices of successful Arkansas schools, including those with large proportions of students with additional needs. The Vendor shall identify practices financial, instructional, and otherwise that result in the schools' high performance;

Proposed Analysis Plan:

This project will consist of the following:

- A Literature Review
- Interviews

To identify the best practices and research-based programs, as called for in the RFP, we will first conduct a literature review (3.0 C. 8). The literature review will focus on policies and programs that support students with diverse student needs and students who are disadvantaged.

Using the value-added measures developed in Project 2, we will develop a list of schools that are "beating the odds." These will be schools that appear to be performing significantly better than their demographics would predict. Once we have this set of school districts, we will select a sample of these districts and conduct interviews with school personnel (3.0 C.9). In the interviews, we will identify what practices, financial, instructional, and otherwise, contribute to the success of students in the school district. Combined, our literature review and our interviews in school personnel will allow us to provide recommendations on school, district, and state policies which promote student success.

Project 11: Fiscal Impacts of School Choice

Scope of Work/Specifications Addressed:

• 3.0 C. 10: Analysis of the impact of voucher programs and tax credits on funding for public education in the state and in other states;

Proposed Analysis Plan:

This project will consist of the following:

- A literature review
- A quantitative analysis determining the cost and/or cost-savings of the Succeed Scholarship program,
- A quantitative forecast of potential cost and/or cost-savings of a new or expanded voucher program with a broader pool of eligible students,
- A quantitative forecast of potential cost and/or cost-savings of a new tax credit scholarship program, assuming various tax credit levels.

The RFP calls for an analysis of the impact of voucher programs and tax credits on funding for public education in the state (3.0 C. 10). Arkansas' first voucher program, the Succeed Scholarship, was enacted in 2015 and families were eligible to enroll in 2018. In the 2018-19 school year, roughly 260 students enrolled in the voucher program. To be eligible for the Succeed Scholarship program, students must have an Individualized Education Program (IEP), or be a foster care child living in a group home or facility. The state currently does not have a tax credit scholarship program.

To analyze the fiscal impacts of the current Succeed Scholarship program, we will require student-level information indicating whether the scholarship recipient was previously enrolled in a public school, whether the student has an IEP, and the scholarship amount. If a scholarship student never attended a public school, and never intended to, the cost associated with the student's scholarship may be considered a new or additional cost to the state. However, if the scholarship recipient would have attended a public school, the state would have had some cost associated with that child's education. Using the current state funding formula, we can estimate the cost or cost-savings of the program.

Similarly, we can estimate the cost or cost-savings of a new and/or expanded voucher program with a broader pool of eligible students using a similar methodology. In this case, we will estimate the number of "switchers" based on the current percentage of students in the Succeed Scholarship program who have switched from a public to a private school. We will use bands around this number to provide a range of estimates. A similar approach will be utilized to assess the potential cost and/or cost-savings of a tax credit scholarship program. In this case, we will also provide projections using a variety of tax credit levels, such as a credit of 50, 75, or 100 percent.

Project 12: Analysis of Waivers

Scope of Work/Specifications Addressed:

• 3.0 C. 11: Assessment of the impact that waivers from state requirements (statute and rules) have on the quality and cost of education, including a recommendation of policy solutions to correct any problems that may be identified;

¹ EdChoice. (2019). Arkansas – Succeed Scholarship Program. Retrieved from: https://www.edchoice.org/school-choice/programs/arkansas-succeed-scholarship-program-for-students-with-disabilities/

² Arkansas Department of Education. (2019). Succeed Scholarship. Retrieved from: http://dese.ade.arkansas.gov/divisions/learning-services/special-education/policy-regulations/succeed-scholarship

Proposed Analysis Plan:

This project will consist of the following:

- An analysis of agency records
- A quantitative analysis
- A descriptive analysis

Since at least 1995, Arkansas has allowed public schools to apply for and obtain waivers exempting them from certain state education requirements.³ The specifics of what requirements can be waived, and the circumstances in which schools and districts can apply for waivers, have evolved due to legal and legislative decisions. As of 2016-2017, 55 Arkansas schools and 81 of Arkansas' 234 regular school districts were operating under a waiver.⁴ Previously collected data from the State of Arkansas Bureau of Legislative Research show that waivers are most often granted for teacher licensure and curriculum requirements. As outlined in the Education Adequacy Consulting Services Request for Proposals, this work product will both assess the impact waivers are having on the quality and cost of education in Arkansas and offer research-based policy solutions to identified problems.

Using agency records from the State of Arkansas Bureau of Legislative Research, archived state statutes, and the Arkansas Department of Education, we will first examine the full legislative history of waivers in Arkansas in order to establish the context for the quantitative analyses. In this analysis, we will include a full overview of the types of waivers granted and the processes for obtaining them. Next, we will conduct a descriptive analysis of the full history of the usage of waivers by type and school/district type.

Using the data from the descriptive analysis and state academic achievement data, we will attempt to assess the impact of waivers on student achievement and cost. This analysis will be based on the creation of a six-year longitudinal statewide dataset in which both schools and districts are the units of analyses. The six-year timing window was chosen to align with the availability of Arkansas Report Card data from the Arkansas Department of Education. The dataset will include school- and district-level student demographic data, finance data, test score performance data, student attainment data, school typologies (i.e. charter or traditional public), and indicators of the type of waivers obtained. The report will then utilize quantitative methodologies (specifically random-effects regression models) to determine the impact of waiver adoptions on school- and district-level test score and attainment outcomes. Subgroup analyses will also be conducted. Additionally, we will conduct an analysis of the impact of waivers on education cost using the same dataset.

Using all this information, we will provide a list of policy solutions for any problems identified. This work will be informed based on a review of waiver policies in other states, and the results of the analysis.

³ District- and School-Level Waivers, State of Arkansas Bureau of Legislative Research, December 19, 2017: http://www.arkleg.state.ar.us/education/K12/AdequacyReports/2018/2017-12-19/DistrictAndSchoolLevelWaiversReportBLR15.pdf

⁴ District- and School-Level Waivers, State of Arkansas Bureau of Legislative Research, December 19, 2017: http://www.arkleg.state.ar.us/education/K12/AdequacyReports/2018/2017-12-19/DistrictAndSchoolLevelWaiversReportBLR15.pdf

Project 13: Crosswalk of Picus and Odden Recommendations

Scope of Work/Specifications Addressed:

• 3.0 C. 15: Comparison of the recommendations previously provided to the Committees by Allan Odden and Lawrence Picus and the policy and funding decisions implemented by the Arkansas General Assembly;

Proposed Analysis Plan:

This project will consist of the following:

• A review of agency records

We will review the recommendations previously provided to the Committees by Allan Odden and Lawrence Picus and crosswalk those recommendations to the current funding policies of the State of Arkansas. In this manner, we will highlight which recommendations were embraced fully, partially, or not at all.

Project 14: Convening of Educators

Scope of Work/Specifications Addressed:

• 3.0 C. 16: The convening of panels of educators in the State of Arkansas, which shall occur in a variety of locations throughout the state and seek input on the needs of schools and potential solutions.

Overview:

This project will consist of the following:

- Focus Groups
- Surveys

The RFP calls for the convening of panels of educators in a variety of locations throughout the state. The purpose of the convening is to seek input on the needs of schools and potential solutions. Educators are on the front lines, dealing directly with students and seeing the needs of their communities. Hearing from them is foundational for all the work we propose to do. As such, we will make every effort to hear from teachers, principals, and other educators in every part of the state.

Proposed Analysis Plan:

This project will consist of the following:

- Focus groups with educators
- A survey of educators throughout the state.

We will conduct a total of 10 focus groups with educators, two focus groups in each of the five regions of the state. One of the focus groups in each region will consist only of instructional staff. The other focus group will consist of administrative and support staff. We will start the process by first identifying a site to host the focus groups in each region. After securing the location, a date, and time, we will solicit recommendations to participate in the convening from a

host of education related organizations, such as the Arkansas Education Association and the Arkansas Association of Educational Administrators. Once we have a list of potential attendees, we will send out an invitation to apply. If we have more than the target number of attendees, we will utilize a stratified random sampling technique to select participants for the focus group. This will allow us to ensure we have individuals from various disciplines, schools, races, ethnicities, etc.

Using data collected from the focus groups, we will develop a survey to be sent to educators throughout the state. Again, we will contact a host of organizations to share the survey to increase the response rate.

Table 3: Gannt Chart of Project Completion

Project														
Troject	Nov	Dec	Jan	Feb	Mar	Apr	May	June	June	July	Aug	Sept	Oct	Nov
#11 – Fiscal Impacts of School Choice				•	1		•	1	1					
#3 – Review of Adequacy Cost Studies														
#14 – Convening of Educators														
#4 – Defining College and Career- Readiness														
#2 – Analysis of the Relationship between Funding & Performance														
#12 – Analysis of Waivers														
#7 – Evaluating Assessment & Tax Policies														
#8 – Recruitment & Staffing Policies														
#9 – Enrollment & Facilities														
#5 – Class, School, and District Size Analysis														
#6 – Poverty & Proxies														
#10 – Best Practices														
#13 – Crosswalk of Picus & Odden Recommendations														
#1 – Funding Formula Analysis & Recommendations														

3.1 Education Adequacy Consulting

I, James V. Shuls, managing member of Shuls and Associates, acknowledge and agree with the requirements set forth in this section.

As requested, I intend to attend various meetings of the Committees and other legislative committees of the Arkansas General Assembly. Given that a significant portion of our research team are based in Arkansas, I anticipate no obstacle in having someone present at any required meeting.

SECTION 4: COST PROPOSAL

- I, James V. Shuls, managing member of Shuls and Associates, acknowledge and agree with the requirements set forth in the following sections:
- 4.0 Compensation
- 4.1 Payment Schedule
- 4.2 Travel, Lodging, and Meals

SECTION 5: ADDITIONAL VENDOR REQUIREMENTS

- I, James V. Shuls, managing member of Shuls and Associates, acknowledge and agree with the requirements set forth in the following sections:
- 5.0 Comprehensive Vendor Information
- 5.2 General Information
- 5.3 Disclosure of Litigation
- 5.5.1 Background Investigation

The following sections will be addressed in further depth elsewhere in the proposal:

- 5.1 Vendor Profile Addressed in the Vendor Profile
- 5.4 Executive Summary Provided at the beginning of this document
- 5.5 Vendor's Qualifications Addressed in Vendor Qualifications

5.1 Vendor Profile

Shuls and Associates

Business Name

Shuls and Associates, LLC; Doing business as "Shuls Policy Consulting"

Primary Contact Information and Business Address

James V. Shuls Managing Member Shuls and Associates 1720 Briarmanor Dr. Lake Saint Louis, MO 63367 (417) 425-3086 James@shulsassociates.com Shuls and Associates, RFP Number: BLR – 190003

Years in Business

Shuls and Associates is a new firm, organized in August 2019. The firm was specifically developed in order to address the needs in this RFP. Although the firm is new, James Shuls has been engaged in education policy research for the past seven years.

Proof Vendor is qualified to do business in the State of Arkansas

Shuls and Associates is in incorporated in the state of Missouri and is registered and in good standings as a foreign LLC within the State of Arkansas, DBA "Shuls Policy Consulting." See Appendix A for the Certificate of Good Standing issues by the Arkansas Secretary of State.

Corporation Information

Shuls and Associates is organized as a single-member limited liability corporation in the state of Missouri. James V. Shuls is the sole member.

1720 Briarmanor Dr.

Lake Saint Louis, MO 63367

States and Jurisdictions where Shuls and Associates works

Shuls and Associates is registered and in good standing in Missouri and Arkansas.

Currently, the firm has one contract with the Schindler Law Firm in the State of Missouri to provide an analysis of the state's funding formula.

As an individual, James Shuls has contracted with firms in Washington D.C., Maryland, Indiana, Missouri, and Texas to provide public policy analysis.

States where Shuls and Associates is currently providing similar services

Shuls and Associates is currently contracted with the Schindler Law Firm to conduct an analysis of Missouri's funding formula. Missouri's foundation formula for public schools currently calculates a school district's local effort based on 2005 assessed valuations. There is concern that this has led to greater inequity as property taxes have increased over time, more so in thriving school districts. In this analysis, I am calculating how state aid would be impacted by updating local effort to current levels. Additionally, I am providing recommendations for changing the formula to increase funding equity. This contract was entered in August 2019.

James Shuls is currently contracted as an individual with the following organizations:

- The Show-Me Institute, a 501(c) 3 located in Missouri. Shuls conducts public policy analysis for the institute. In the past, he has authored a primer on Missouri's funding formula and fiscal notes for school choice programs. Shuls has contracted with the Show-Me Institute for five years.
- American Federation for Children Growth Fund, a 501(c) 3 located in Washington D.C. For AFC, Shuls is using data from the National Center for Education Statistics' Private School Universe Survey to estimate the total number of available seats in existing public schools in each of the 50 states. Shuls has contracted with AFC three times since 2016.

Shuls and Associates, RFP Number: BLR – 190003

Disclosures

No member of Shuls and Associates has any known felonies or other criminal offenses, other than a traffic violation.

No member of Shuls and Associates has any bankruptcies, insolvencies, reorganizations, or takeovers to disclose.

Equal Employment Opportunity Policy

Shuls and Associates is committed to maintaining a positive and productive work environment in which all individuals are treated with respect and dignity. Shuls and Associates complies with all applicable laws related to unlawful discrimination in each jurisdiction where the firm operates.

Scope: This policy applies to applicants, employees, and subcontractors of Shuls & Associates.

Policy Statements: Shuls and Associates is an equal opportunity employer and prohibits discrimination against any applicant, employee or subcontractor based on any legally protected characteristic in the locality in which it operates. For example, in the United States, decisions related to recruiting, hiring, promoting, compensation, benefits, training, demotions, terminations, and all other aspects of employment must be made without regard to race, color, age, disability, sex (including pregnancy), childbirth or related medical conditions including but not limited to lactation, sexual orientation, gender identity or expression, veteran or military status, religion, national origin, ancestry, marital or familial status, genetic information, status with regard to public assistance, citizenship status or any other characteristic protected by applicable equal employment opportunity laws. Harassment, threats, bullying, and slurs based on such protected characteristics are also prohibited.

Shuls and Associates prohibits retaliation against any person based upon that individual's complaint of discrimination, participation in any investigation (internal or external) of discrimination, opposition to any act or practice that is discriminatory or reasonably viewed as discriminatory, or exercise of any other right protected by applicable equal employment opportunity laws. For example, an employee may not be terminated, demoted, or disciplined because he or she engaged in these protected activities.

Shuls and Associates undertakes efforts to recruit diverse qualified applicants in compliance with all applicable equal employment opportunity laws.

Shuls and Associates makes reasonable accommodations for the known disabilities of qualified applicants and employees and for sincerely held religious beliefs, unless undue hardship would result.

5.5 Vendor's Qualifications

History of Company

Over the past seven years, James V. Shuls, Ph.D., has established himself as a premier scholar in the school finance community. His interest in finance began while completing his Ph.D. at the University of Arkansas, when one of his professors required him to analyze and explain how the school funding system worked in one state. Upon graduating with his Ph.D. in education policy, Shuls was named the director of education policy at the Show-Me Institute, a non-profit, non-partisan, 501(c)3 think tank, focused on market-oriented solutions to public policy. Quickly, his knowledge of school finance was put to use as he authored a primer on Missouri's foundation formula. His ability to take a complex topic and make it accessible to policymakers and concerned citizens has made the primer one of his most read pieces. Indeed, the primer has been used by many state policymakers (including candidates for governor) to understand how Missouri funds schools.

In addition to his explanation of Missouri's funding formula, as director of education policy, Shuls also conducted a variety of analyses related to school finance. This includes analyzing teacher salaries, examining teacher pension systems, and conducing fiscal analyses of school choice programs.

In 2014, the department chair of Education Leadership and Policy Studies at the University of Missouri-St. Louis took note of Shuls scholarship on school finance matters and recruited him to join the department. As a professor, Shuls has taught courses in school finance, collective bargaining, school facilities, education policy, and program evaluation to aspiring school principals and superintendents. He has also continued to conduct research related to school finance, publishing in journals such as: the *International Review of Accounting, Banking, and Finance*; the *Journal of Education Finance*; the *Kansas Journal of Law & Public Policy*; and *Education Economics*, among others. Additionally, he has authored a chapter on rural school finance in the edited book, "No longer forgotten: The triumphs and struggles of rural education in America."

For his research on inequities embedded in teacher pension systems, Shuls was awarded the University of Missouri – St. Louis' "Junior Investigator of the Year" award in 2017. This is the highest research award the university gives to junior faculty members, pre-tenure.

Shuls understanding of school funding formulas and school finance issues brought him to the attention of the lawyers representing the State of New Mexico in the school finance case, Martinez, et al./Yazzie, et al. v. The State of New Mexico. The plaintiffs in the case were using a costing out study conducted by American Institutes for Research (AIR) to make the claim that the state was underfunding education. The study primarily utilized a professional judgement approach to estimate the cost of an adequate education. In 2017, Shuls was retained by the state's attorneys to analyze the AIR report and offer expert testimony. Shuls testimony regarding the Professional Judgement methodology, in part, led the court to conclude, the methodology "struck the Court as being one where a collective wish list was compiled and then reduced based on political reality."

In his written testimony to the New Mexico court, Shuls noted "the Professional Judgment methodology has significant potential for bias among the study's participants and it is not replicable." Moreover, he showed that "Professional Judgment studies consistently produce adequacy estimates that are biased upwards." Importantly, he noted that every single Professional Judgment study, so far as he could find, found that states needed to spend significantly more money than they were currently spending. Moreover, the Professional Judgment approach consistently produced adequacy estimates that were significantly larger than all other costing-out methods.

In many ways, Shuls' experience in the New Mexico case led to the formation of Shuls and Associates. At this time, there are only a handful of firms that states can turn to for analysis of school finance issues. Most of these firms continue to utilize these flawed methods to analyze state spending. Shuls believes in using methodologically sound research methods to inform public policy. To that end, he created Shuls and Associates to provide rigorous analysis of education policy and school finance issues.

Plan for Assisting the Committees

In addition to executing the analysis plan laid out in this proposal, Shuls and Associates is committed to assisting the Committees in meeting their goals and objectives. A member of our team will be available to attend any requested meeting. James Shuls will typically attend these meetings. In his absence, a member of the Office for Education Policy will fill in. The OEP's proximity to Little Rock allows them to respond on relatively short notice and to be readily available to the Committees.

Three Most Recent Comparable Contracts and References

Client: Schindler Law Firm Contact: Joshua Schindler Dates: August 2019 – Present Email: josh@shindlerlawfirm.com

Phone: (314) -862-1411

Scope of Work: Shuls and Associates is currently contracted with the Schindler Law Firm to conduct an analysis of Missouri's funding formula. Missouri's foundation formula for public schools currently calculates a school district's local effort based on 2005 assessed valuations. There is concern that this has led to greater inequity as property taxes have increased over time, more so in thriving school districts. In this analysis, I am calculating how state aid would be impacted by updating local effort to current levels. Additionally, I am providing recommendations for changing the formula to increase funding equity. This contract was entered in August 2019. See Appendix B for a sample of the work being conducted.

Shuls and Associates, RFP Number: BLR – 190003

Client: Maryland Public Policy Institute

Contact: Christopher Summers
Dates: February 2018 – June 2018
Email: csummers@mdppolicy.org

Phone: (240) 686-3510

Scope of Work: James Shuls contracted with the Maryland Public Policy Institute as an individual. From 1998 to 2014, Maryland public schools increased spending on operating expenses by \$3.8 billion in inflation adjusted dollars. In 2016, the Maryland legislature established the Commission on Innovation and Excellence in Education to review the findings of the state's adequacy study conducted by Augenblick Palaich and Associates and to provide suggestions for revising the state's funding system. In 2018, the commission released a preliminary report calling for a host of reforms and new spending items.

The Maryland Public Policy Institute is a 501(c)3 public policy think tank and is considered a fiscal watch dog in the state. Given the extensive recommendations of the commission's report, the Institute wanted an education expert to conduct an independent analysis of the commission's recommendations. As such, I entered into a contract with the Institute and authored "An Analysis of the Kirwan Commission Recommendations." You can see this report in Appendix C.

Client: Show-Me Institute Contact: Brenda Talent Dates: August 2014 – Current

Email: brenda.talent@showmeinstitute.org

Phone: (314) 454-0647

Scope of Work: The Show-Me Institute, a 501(c) 3 located in Missouri. For the past five years, James Shuls has contracted with the Institute as an individual to provide public policy analysis. In the past, he has authored a primer on Missouri's funding formula and fiscal notes for school choice programs. When invited, Shuls has also provided testimony to the state's legislative bodies. In Appendix C, you will find Shuls testimony, "Fiscal Notes for Education Savings Accounts (ESAs) Fail to Account for Cost Savings. In this piece, he uses his knowledge of the state's funding formula to demonstrate how the state should calculate potential cost savings of school choice programs.

Shuls and Associates Key Staff

James V. Shuls, Ph.D., will serve as the leader of the project. Shuls is an assistant professor of educational leadership and policy studies at the University of Missouri – St. Louis. In this capacity, he teaches courses in program evaluation, education policy analysis, and school finance. At the University, he also serves as the education leadership graduate program director and the associate chair of Educator Preparation and Leadership department. Shuls has conducted education policy consulting for seven years. His knowledge of Missouri's funding formula, as well as the primer he wrote on the topic, have made him a go to source for many policymakers within the state. He has published in numerous peer-reviewed journals, such as the *Journal of Education Finance, Educational Policy, Education Economics, Social Science Quarterly*, and the

Shuls and Associates, RFP Number: BLR – 190003

International Review of Accounting, Banking and Finance. Shuls is a member of the Association for Education Finance and Policy and Missouri Professors of Education Administration.

Office for Education Policy Key Staff

Opened in the fall of 2003, the Office for Education Policy (OEP) is an applied research center in the College of Education and Health Professions at the University of Arkansas. The OEP's staff includes faculty members, research associates, and graduate students who specialize in education research and policy.

The OEP's mission is to serve as a resource to Arkansas' lawmakers, educators, administrators, and other stakeholders to support them in thoughtful decision-making concerning K-12 education in the State of Arkansas. We seek to help the state's education leaders bridge the gap between research and practice by providing them with timely, actionable information and advice on current education policy issues.

Address

214 Graduate Education Building University of Arkansas Fayetteville, AR

Primary Contact
Josh McGee
JoshMcGee@uark.edu
(479) 575-3773

The Office for Education policy will conduct the analyses on Projects 1, 2, 6, and 7, and will provide critical review on other projects. Key staff include:

Joshua B. McGee, Ph.D., will serve as the chief economist on the project. McGee is associate director of the Office for Education Policy and a research assistant professor in the Department of Education Reform at the University of Arkansas. He is also a senior fellow at the Manhattan Institute. McGee is an economist whose work focuses on evidence-based policy and public finance. His research investigates issues related to retirement policy, K–12 education, and economic development and has been published in many popular media outlets and scholarly journals. He has deep experience both in the non-profit and government sectors. His experience includes nearly a decade as an executive at the Laura and John Arnold Foundation and as chairman of the Texas State Pension Review Board where he was appointed by Governor Greg Abbott. He currently serves on the boards of EdBuild, a non-profit focused on school finance issues, MDRC, and the Equable Institute.

Sarah McKenzie, Ph.D., is Executive Director of the <u>Office for Education Policy</u> at the University of Arkansas. Sarah received her PhD from the University of Arkansas in Educational Statistics and Research Methods in 2009 and was awarded a Walton Foundation Doctoral Fellowship Award. She received her Master of Arts in Early Childhood Education from Mills College in 1994 and her B.A. in Literature from Claremont McKenna College.

Originally from Arizona, Dr. McKenzie was most recently the Director of Assessment, Research and Accountability for Fayetteville Public Schools. Sarah is a certified Phi Delta Kappa International Curriculum Auditor and has presented at conferences nationally and internationally on educational statistics. Previous experience includes the National Office for Research on Measurement and Evaluation Systems, Central's Center for Children, and San Ramon Valley Unified School District in California.

Robert Costrell, Ph.D., is Professor of Education Reform and Economics and holds the Endowed Chair in Education Accountability at the University of Arkansas. His recent research topics include teacher pension policy, fiscal impact of school choice, and methodologies for school funding estimation.

Professor Costrell has both an academic and policy-making background. His academic career has featured seminal publications on teacher pensions, the economic theory of educational standards, income distribution and testing, and school finance litigation. These have appeared in the *American Economic Review*, the *Journal of Political Economy*, the *Journal of Public Economics*, the *Journal of Pension Economics and Finance*, and *Education Finance and Policy*, as well as general interest publications, such as *Brookings Papers on Education Policy* and *Education Next*.

From 1999 to 2006, Dr. Costrell served in major policy roles for three governors of Massachusetts, including policy research director and chief economist, with a focus on education policy as that state's landmark reforms were implemented. As education advisor to Governor Mitt Romney, he helped develop the governor's comprehensive proposal for a second round of education reform in 2005 and led the reforms of the state's district and charter funding formulas. In 2003, Dr. Costrell's extensive expert testimony in Massachusetts' school finance case (*Hancock v. Driscoll*) proved critical to the successful defense of that state's education reform program. He represented the administration on the Public Employee Retirement Administration Commission (2001-03) and the Massachusetts School Building Authority (2005-06).

Dr. Costrell has served on the U.S. Department of Education's Advisory Council on Education Statistics, appointed by Secretary Paige (2001-02) and the National Technical Advisory Council for NCLB (2008-09), appointed by Secretary Spellings.

Independent Consultants

Shaun M. Simms, PMP, SA, CSSGB is a Director, Supply Chain Project Management at a Fortune 20 company. He will serve as Program Director on this evaluation. Shaun currently leads a multi-million dollar portfolio of projects, aimed at making prescription drugs safer and more affordable. With over 10 year of experience in portfolio, program, and project management, his career project portfolio is over \$250m dollars. In 2018, he was named the Project Management Institute of Metro St. Louis "Project Leader of the Year" for his leadership in The Bloom Café, a social enterprise providing individuals with disabilities career training, career experience, and career placement. Shaun has also spoken at local, regional, and national project management conferences, and is on the Project Management Institute Metro St. Louis Board of Directors. He

Shuls and Associates, RFP Number: BLR – 190003

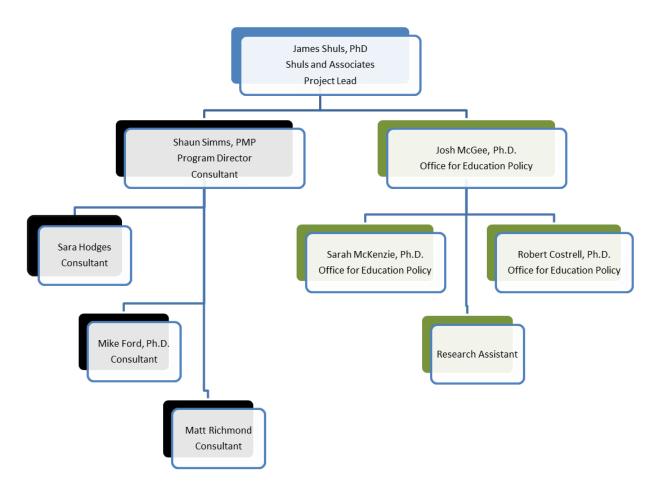
holds a Bachelor's in Business Administration, along with a Master's of Science in Administration from Lindenwood University.

Michael Ford, Ph.D., will lead Project 12 – Analysis of Waivers. Michael is an associate professor of public administration at the University of Wisconsin at Oshkosh. As a professor, Ford teaches courses in analytic methods for public administration, public budgeting and financial management, as well as a variety of other public administration courses. His research focuses on education finance policy and law, education reform, board governance, and legislative fiscal note practices. Ford is an active member in public administration professional societies. In 2016, he was named an American Society for Public Administration Founders' Fellow.

Sara Hodges will provide general research support and data visualization. Sara is currently the Director of Data & Visualizations at EdBuild. She leads the team that analyzes large, complex datasets and turns them into compelling stories and visualizations. Prior to EdBuild, she had an environmental mapping consultancy and worked on projects with the United Nations Environment Programme, New York Hall of Science, Carnegie Museum of Natural History, and others. She received a master's degree in Geography from CUNY Hunter College and a bachelor's degree in Mathematics from Colorado College.

Matt Richmond will provide general research support. He is currently the Chief Program Officer at EdBuild, a nonprofit focused on bringing common sense and fairness to the way states fund public schools. He is the author of The Hidden Half: School Employees Who Don't Teach and co-author of Financing the Education of High-Need Students; his work has been featured on NPR: Marketplace, The Huffington Post, RealClear Politics, Education Week, and other media outlets. At EdBuild, Matt manages all program-related activities, including state partnerships related to education-finance reform and national-level research. Prior to EdBuild, Matt worked as an adviser to the Government of Malawi on civil-service reform, through a Fulbright Fellowship, and was a research analyst at the Thomas B. Fordham Institute. He received a master's degree in international development from the University of Pittsburgh and a bachelor's in political science and economics from the University of North Carolina at Chapel Hill.

Organizational chart of the project



SECTION 6: EVALUATION CRITERIA FOR SELECTION

I, James V. Shuls, managing member of Shuls and Associates, acknowledge and agree with the requirements set forth in the following sections:

- 6.0 Generally
- 6.1 Evaluation Criteria

APPENDIX A: CERTIFICATE OF GOOD STANDING



Arkansas Secretary of State John Thurston

State Capitol Building ♦ Little Rock, Arkansas 72201-1094 ♦ 501-682-3409

Certificate of Good StandingI, John Thurston, Secretary of State of the State of Arkansas, and as such, keeper of the records of domestic and foreign corporations, do hereby certify that the records of this office show

SHULS POLICY CONSULTING

formed under the laws of the state of Missouri, and authorized to transact business in the State of Arkansas as a Foreign Limited Liability Company, was granted a Registration of Foreign Limited Liability Company by this office September 13, 2019.

Our records reflect that said entity, having complied with all statutory requirements in the State of Arkansas, is qualified to transact business in this State.



In Testimony Whereof, I have hereunto set my hand and affixed my official Seal. Done at my office in the City of Little Rock, this 16th day of September 2019.

John Thurston

Online Certificate Authorization Code: 613869e8bb906b8

To verify the Authorization Code, visit sos.arkansas.gov

APPENDIX B: CONTRACT AND GRANT DISCLOSURE CERTIFICATION FORM

CONTRACT AND GRANT DISCLOSURE AND CERTIFICATION FORM

4S A CONDITION OF OBTAINING, EXTENDING, AMENDING, OR RENEWING A CONTRACT, LEASE, PURCHASE AGREEMENT, COUNTRY: Failure to complete all of the following information may result in a delay in obtaining a contract, lease, purchase agreement, or grant award with any Arkansas State Agency. OR GRANT AWARD WITH ANY ARKANSAS STATE AGENCY, THE FOLLOWING INFORMATION MUST BE DISCLOSED: Ξ. Both? ZIP CODE: 63367 Services?
 Services Servic Sames Goods? 2 FIRST NAME: IS THIS FOR: STATE: ン に と TAXPAYER ID NAME: Shuls and Associates ADDRESS: 1720 Briakmande SUBCONTRACTOR NAME: orr: Lake Saint Louis YOUR LAST NAME: 5 Nuls Yes No SUBCONTRACTOR

FOR INDIVIDUALS*

Indicate below if: you, your spouse or the brother, sister, parent, or child of you or your spouse is a current or former: member of the General Assembly. Constitutional Officer, State Board or Commission Member, or State Employee:

	Mar	Mark (V)	Name of Position of Job Held	For How Lond?		/ons
Position Held	2		e name of		[i.e., Jane Q. Public, spouse, John Q. Public, Jr., child, etc.]	tc.]
	Current Former	Former	board/ commission, data entry, etc.]	From To MM/YY MM/YY	Person's Name(s)	Relation
General Assembly						
Constitutional Officer						
State Board or Commission Member						
State Employee	0					

☐ None of the above applies

FOR AN ENTITY (BUSINESS)

Indicate below if any of the following persons, current or former, hold any position of control or hold any ownership interest of 10% or greater in the entity: member of the General Assembly, Constitutional Officer, State Board or Commission Member, State Employee, or the spouse, brother, sister, parent, or child of a member of the General Assembly, Constitutional Officer, State Board or Commission Member, or State Employee. Position of control means the power to direct the purchasing policies or influence the management of the entity.

	Mar	Mark (√)	Name of Position of Job Held	For How Long?	, Long?	What is the person(s) name and what is his/her % of ownership interest and/or what is his/her position of control?	of ownership inte	rest and/or
Position neta	Current	Current Former	[senator, representative, name of board/commission, data entry, etc.]	From	To MM/YY	Person's Name(s)	Ownership Interest (%)	Position of Control
General Assembly								
Constitutional Officer		0						
State Board or Commission Member	0	0						
State Employee	0	0						

None of the above applies

Contract and Grant Disclosure and Certification Form

Failure to make any disclosure required by Governor's Executive Order 98-04, or any violation of any rule, regulation, or policy adopted pursuant to that Order, shall be a material breach of the terms of this contract. Any contractor, whether an individual or entity, who fails to make the required disclosure or who violates any rule, regulation, or policy shall be subject to all legal remedies available to the agency.

As an additional condition of obtaining, extending, amending, or renewing a contract with a state agency I agree as follows:

- Prior to entering into any agreement with any subcontractor, prior or subsequent to the contract date, I will require the subcontractor to complete a CONTRACT AND GRANT DISCLOSURE AND CERTIFICATION FORM. Subcontractor shall mean any person or entity with whom I enter an agreement whereby I assign or otherwise delegate to the person or entity, for consideration, all, or any part, of the performance required of me under the terms of my contract with the state agency.
- 2. I will include the following language as a part of any agreement with a subcontractor:

Failure to make any disclosure required by Governor's Executive Order 98-04, or any violation of any rule, regulation, or policy adopted pursuant to that Order, shall be a material breach of the terms of this subcontract. The party who fails to make the required disclosure or who violates any rule, regulation, or policy shall be subject to all legal remedies available to the contractor.

No later than ten (10) days after entering into any agreement with a subcontractor, whether prior or subsequent to the contract date, I will mail a copy of the Contract and Grant Disclosure and Certification Form completed by the subcontractor and a statement containing the dollar amount of the subcontract to the state agency. 3

APPENDIX C: ANALYSIS OF MISSOURI'S FOUNDATION FORMULA

Analysis of Missouri's Foundation Formula

James V. Shuls, Ph.D.

(This is a first draft of an ongoing project)

Prepared for Joshua Schindler, Esq.
The Schindler Law Firm
141 N. Meramec, Suite 201
St. Louis, MO 63105

Table of Contents

1.0 Introduction	3
1.1 Understanding Local Effort	4
Table 1: Impact of Changes in Assessed Valuation in Two Hypothetical School Districts	4
1.2 Hold-Harmless	5
1.3 Overview of Paper	5
2.0 Calculating State Aid Using 2018 Assessed Valuation	6
2.1 Methods for Updating Local Effort	
2.2 Methods for Updating State Aid	
2.3 Impact of Updating Local Effort	7
Table 2: Comparison of State Aid using Assessed Valuation from Different Years	7
Table 3: Top 10, Change in State Revenue if 2018 AV is Used in Funding Formula	8
2.4 Summary and Conclusions	8
3.0 Calculating State Aid Using 2018 Assessed Valuation and Updating SAT	8
3.1 Methods for Calculating State Aid Using a Dynamic Formula	8
3.2 Moving to a Dynamic Funding Formula, using 2018 AV and Adjusting the SAT	9
Table 4: Updating AV to 2018 while Adjusting SAT to be Revenue Neutral (\$7,237.69)	
Table 5: Biggest Winners and Losers	9
3.3 Demographic Characteristics of School Districts with Revenue Changes	9
Table 6: Descriptive Statistics of School Districts based on Proposed Dynamic Model of Calculating Local Effort	10
Figure 1: Change in Aid and Assessed Valuation per Wada	11
Figure 2: Change in Aid and Percent Minority Students	12
Figure 3: Change in Aid and Percent FRPL Eligible Students	12
Figure 4: Change in Aid and Percent 8th Graders Scoring Proficient or Advanced, Math	12
Figure 5: Change in Aid and Percent 8th Graders Scoring Proficient or Advanced, ELA	12
4.0 Summary and Conclusion	13

1.0 Introduction

Passed in 2005, Senate Bill 287 sought to remake Missouri's funding formula for public education. The summary of the bill sums up the desire of the new funding model, "Currently, the state's education formula is essentially an equalized tax-rate driven formula, meaning that the formula provides a certain amount of money per student, per penny of tax rate. This act seeks to transition the state away from this tax-rate driven philosophy to a formula that is primarily student-needs based." By changing the funding formula, the state was hoping to achieve two goals. First, the state wanted to ensure that each school district received an *adequate* amount of funds to educate students. Second, the state sought to increase *equity* among school districts.

Four basic parts in the funding formula help determine how much state aid a school district will receive: weighted average daily attendance (WADA), the dollar value modifier (DVM), the state adequacy target (SAT), and local effort. The state uses WADA instead of enrollment or average daily attendance in an effort to provide additional assistance to school districts with high concentrations of students with special needs or from disadvantaged backgrounds, these students are "weighted" and count as more than one student in districts with high concentrations. As such, WADA helps to increase equity in the funding formula. The DVM is an adjustment which provides school districts additional funds if they are in areas with a higher cost-of-living, such as Kansas City and Saint Louis. The SAT is the dollar amount the state has determined is an "adequate" amount of funding to educate a child. By multiplying WADA by the DVM and the SAT, we determine how much revenue a school district should have to educate each child in the school district.



In Missouri, the funding formula relies on both local and state dollars. To determine how much the state should provide the school district, the state subtracts out how much revenue a school district can raise locally. Here again is a way in which the funding formula increases equity among school districts. School districts in more affluent parts of the state will have higher property values and, therefore, will have higher local effort than districts in less affluent areas. As a result, the state provides more assistance to needier school districts.

Unlike the other portions of the formula, however, local effort is not a "true" estimate of how much school districts raise locally. Local effort is derived by multiplying a district's 2005 assessed valuation by what is known as the performance levy, \$3.43 per \$100 of assessed valuation. Residents in school districts can choose to tax themselves more or less than the performance levy. In 2018, 2016 of 515 school districts taxed themselves at a rate lower than \$3.43.

In this analysis, we are not concerned with the variation in actual revenue and the formula estimated revenue caused by differences in tax rates. After all, school districts and their residents

have the ability to set these rates and are, to some extent, responsible for this variation. Using a property tax assessment fixed to 2005 valuations, however, is a matter of state policy. It is possible that this policy could lead, over time, to greater inequities in the state's funding formula.

1.1 Understanding Local Effort

Take for example two hypothetical school districts (Table 1). Both school districts have a WADA of 1,000 and are in an area with a DVM of 1.0. In 2005, these two hypothetical school districts even had the same assessed valuation, \$50,000,000. As a result, they receive an equal allotment of funds from the state through the funding formula, \$4.593 million. Over time, however, the assessed valuation of property grows at a slower rate in one district. By 2018, the low growth district's assessed valuation is \$75 million, while the high growth district's AV is \$100 million. Yet, since the formula is based on 2005 property values, the two districts will continue to receive the same amount of state funding, \$4.593 million. As a result, the high growth school district will now have \$858,000 than the low growth district, a difference of \$858 per pupil

Table 1: Impact of Changes in Assessed Valuation in Two Hypothetical School Districts

		Low Growth District	High Growth District
	WADA	1,000	1,000
	DVM	1.0	1.0
District	SAT	\$6,308	\$6,308
Characteristics	Total Needed	\$6,308,000	\$6,308,000
	(WADA x DVM x		
	SAT)		
	Assessed Valuation 2005	\$50,000,000	\$50,000,000
Revenue	Performance Levy	\$3.43 per \$100 of	\$3.43 per \$100 of
Calculation Using		assessed valuation	assessed valuation
2005 Assessed	Local Effort	\$1,715,000	\$1,715,000
Valuation	State Aid	\$4,593,000	\$4,593,000
	Total Revenue	\$6,308,000	\$6,308,000
Revenue Calculation Using	Assessed Valuation 2018	\$75,000,000	\$100,000,000
Actual Local	Local Effort	\$2,572,500	\$3,430,000
Effort and State Aid Based on	State Aid	\$4,593,000	\$4,593,000
2005 Assessed Valuation	Total Revenue	\$7,165,000	\$8,023,000

This example is a bit simplistic, but it illustrates the issue at hand. If the state continues to hold local effort constant, at 2005 levels, the funding formula will increasingly favor school districts with higher rates of growth in assessed valuation. These tend to be wealthier school districts. The formula will increasingly become less progressive. On average, from 2005 to 2018, school district assessed valuations increased by 67.7 percent. These changes, however, were not uniform. At the 25th percentile, districts saw an increase in assessed valuation of 63.0 percent; at the 75th percentile the increase was 72.7 percent. At the top, the 99th percentile almost doubled assessed valuation, 95.0 percent.

1.2 Hold-Harmless

When the legislature enacted the current foundation formula, it included a hold-harmless provision. Often, hold-harmless provisions are instituted as a political compromise. These provisions are a way to ensure school districts will not lose funds when switching to a new formula. Policymakers may choose to sunset hold-harmless provisions over time or to phase them out. No such provision was included in Missouri's hold-harmless clause.

Under the foundation formula, Missouri public school districts can choose if they want to be a "formula" district or if they wish to be held-harmless.² Districts make this decision annually. If a school district would have received more funds under the old funding formula, as compared to the new formula, the district chooses to be held-harmless. Essentially, this is a guarantee that a school district's funding will not decline below what they received prior to the switch to the current formula. Each year, roughly one-third of all public school districts are held-harmless.

There are two different types of hold-harmless provisions, depending on school district size. School districts with fewer than 350 students are guaranteed the exact same amount of total state aid as they received in 2005-06. Meanwhile, school districts with more then 350 students are guaranteed they will receive the same amount of funding per-pupil.

1.3 Overview of Paper

This paper seeks to estimate the level to which the current funding formula, with a fixed local effort, has, over time, led to increased funding for some school districts. I do this in two ways. First, I estimate the impact of updating how local effort is calculated. Instead of using assessed valuation from 2005, as is the current practice, I estimate how much state aid each school district would receive if 2018 assessed valuations were used to calculate local effort. Because assessed valuation tends to increase over time, a drop in state aid should be expected by this change.

To offset the drop in state aid, I demonstrate the impact of moving to a dynamic funding formula that would be capable of annually updating local effort while maintaining a consistent level of state funding. To do this, the SAT would need to be adjusted upwards. In this analysis, I adjust the SAT to a level that will keep the total amount of state formula aid almost constant.

¹ This figure represents the average district, not the state average.

2.0 Calculating State Aid Using 2018 Assessed Valuation

In the funding formula, the first three parts (WADA, DVM, SAT) determine how much revenue a school needs to adequately educate a student. The fourth part, local effort, nets out how much of that revenue could be raised locally if the school district were to have an assessed valuation of \$3.43 per \$100 of assessed valuation. It should go without saying but changing any one part of this formula would lead to changes in the amount of funds the state provides to school districts. If WADA, the DVM, or the SAT are increased, required state aid would increase, and vice versa. Similarly, if local effort were to increase, the required amount of state aid would decrease. The local school districts would be providing more funds for schools and the state would be able to spend less.

The first key question I answer in this paper is, "What would happen if the formula used 2018 assessed valuation instead of 2005 assessed valuation to determine local effort?"

To answer this research question, data were obtained via DESE.³ These data include the assessed valuation of each school district for the years 2005 and 2018. Assessed valuation is a key component in calculating a school district's local effort. DESE also provided Excel workbooks which provided all the necessary parts to calculate state aid for each school district, including the 2018 WADA, the DVM, and the SAT.

2.1 Methods for Updating Local Effort

To calculate how much state aid would be required, I had to first update local effort to 2018 levels. Step one in this process was to multiply 2018 AV by the performance levy (\$3.43 per \$100 of assessed valuation). Next, I deducted the tax collection fees from the revenue received based on the performance levy. This yielded the local property tax effort. This was then added to the portion of funds received from Prop C, the state sales tax, which are counted as local dollars. The sum of these two figures provided the local effort based on 2018 property tax values.

As we might expect, AV generally increased from 2005 to 2018. Just four school districts saw a decline in assessed valuation from 2005 to 2018.² As a result, if we used 2018 AV instead of 2005, we would see an increase in local effort. On average, local effort would increase by \$1.95 million. In total, it would increase by over \$1 billion. The largest increase occurred in the Parkway School District, which saw an increase in local effort of \$41.5 million.

2.2 Methods for Updating State Aid

Once local effort was calculated, I inserted it into the funding formula to determine how much state aid a school district would receive if the AV were updated from 2005 to 2018. To determine state aid, WADA is multiplied by the DVM and the SAT to provide the District Total Modified SAT. Next, I deducted the updated local effort. Then, I determined if the school district would be eligible to be held-harmless. This occurs if the district's 2005 state aid is higher than the new 2018 state aid.

² Riverview Gardens, Campbell R-II, New Madrid, and South Iron.

2.3 Impact of Updating Local Effort

As noted, between 2005 and 2018 all but four school districts saw an increase in overall assessed valuation. Thus, if the formula were updated to use 2018 AV instead of 2005 AV, the level of state aid would be reduced significantly. In Table 2, I present the current calculation of required state aid, which uses 2005 AV, and a projected calculation of required state aid if 2018 AV were to be used. These calculations use the current SAT of \$6,308. In 2018, using 2005 AV, the state funding formula called for \$3.368 billion for school districts. This was the equivalent of \$3,693.44 per WADA. At this time, 186 school districts were held-harmless, meaning they were not on the current formula. They were guaranteed the same level of funding they received under the previous formula.

Table 2: Comparison of State Aid using Assessed Valuation from Different Years

•	Total State Aid	Per WADA aid	Districts	Districts	Number of
			Gaining Funds	Losing	Hold-
				Funds	Harmless
					Districts
Using AV	\$3,367,931,220	\$3,693.44	NA	NA	186
FY 2005					
Using AV	\$2,823,591,061	\$3,096.49	0	330	328
FY 2018					

If the AV were updated to 2018, and this were the only change in the formula, total state aid would drop by \$544 million to \$2.824 billion. The per WADA amount would be \$3,096.49. In this scenario, 328 school districts would qualify for hold-harmless status. This indicates they received more funding per pupil in 2005 than they would receive under this new formula. In total, 330 school districts would see a decline in state aid. As expected, no school district would be better off in this scenario. School districts with higher AV would have higher local effort in the formula and would receive less state funding. The current formula already adjusts when property values decrease, therefore, these districts would not see any gain in only adjusting AV to 2018 levels.

Table 3 displays the school districts that would see the largest decline in overall state dollars if the state went from using 2005 AV to the 2018 AV. Not surprisingly, these tend to be larger school districts in areas of the state that are growing. Wentzville, for example, has been one of the fastest growing school districts in the state. They would receive \$34.4 million less if the formula was updated to 2018 AV.

Table 3: Top 10, Change in State Revenue if 2018 AV is Used in Funding Formula

WENTZVILLE R-IV	\$(34,435,358.00)
SPRINGFIELD R-XII	\$(28,289,347.00)
FT. ZUMWALT R-II	\$(19,937,733.00)
PARK HILL	\$(19,343,699.00)
ROCKWOOD R-VI	\$(16,098,036.00)
LEE'S SUMMIT R-VII	\$(15,855,691.00)
COLUMBIA 93	\$(12,107,748.00)
LIBERTY 53	\$(11,223,483.00)
BLUE SPRINGS R-IV	\$(10,144,834.00)
NORTH KANSAS CITY 74	\$(9,856,490.00)

2.4 Summary and Conclusions

In this section, I have shown what would happen if the state were to update the funding formula to rely on 2018 AV instead of being fixed at 2005 levels. Not surprisingly, a majority of school districts would see a decline in state revenue. This is because their AV is higher in 2018 and as a result, so is their local effort. If local effort increases, without a change to any other part of the formula, state aid will decrease.

In this section, I have described the changes as resulting in a "loss" of revenue for school districts. That is how this type of change would be perceived by public school officials. Another way to look at this is that the state may be overfunding some school districts and underfunding others. By keeping local effort static, fixed to 2005 AV, state funding does not decrease in school districts that are becoming increasingly wealthy. This can lead to greater inequities over time. If instead the funding formula were dynamic, it would be possible to shift state funding from school districts that are experiencing an increase in local effort to those who are experiencing less growth in local effort. This is what I explore in the next section.

3.0 Calculating State Aid Using 2018 Assessed Valuation and Updating SAT

Our current formula is static when it comes to assessing local effort.³ Over time, this leads to the state providing greater support for flourishing school districts than they otherwise would under other funding systems. For instance, if the state used current year AV, it could adjust the SAT to offset any state aid that would be "lost" by school districts. Doing so would allow the state to maintain the same amount of total state aid, meaning this proposed change would be revenue neutral.⁴

3.1 Methods for Calculating State Aid Using a Dynamic Formula

In the previous section, I detailed how I updated the formula to use 2018 AV. Doing so led to a precipitous drop in state aid, as local effort increased in all but four school districts. Using that

³ The formula does allow for local effort to adjust if a school district loses assessed valuation.

⁴ The state could still have a mechanism in place to allow state aid to increase and keep pace with inflation.

information, I calculated what the new SAT would have to be to maintain the total level of state aid. I identified \$7,237.69 as the SAT that would provide an almost identical amount of total state aid while using 2018 AV.

3.2 Moving to a Dynamic Funding Formula, using 2018 AV and Adjusting the SAT

In Table 4, I present total state aid under the current static funding formula, which uses 2005 assessed valuation, and a dynamic formula which uses 2018 AV and adjusts the SAT to maintain the same level of funding. By moving to this formula, 111 school districts would see a decline in state funding; while 241 school districts would see an increase in state funds. The total number of school districts held-harmless would increase from 186 to 190.

Table 4: Updating AV to 2018 while Adjusting SAT to be Revenue Neutral (\$7,237.69)

•	Total State Aid	Per WADA aid	Districts	Districts	Number of
	1000100001110	101 //11211011	Gaining Funds	Losing	Hold-
			Cuming I union	Funds	Harmless
					Districts
Using AV	\$3,367,931,220	\$3,693.44	NA	NA	186
FY 2005					
Using AV	\$3,367,933,024	\$3,693.45	241	111	190
FY 2018					

In Table 5, I highlight the ten districts receiving the largest total increase in funds and the largest decrease in funds under this proposed plan.

Table 5: Biggest Winners and Losers

There et 2188est it times a time Zes		1	1
Districts Receiving an Increase	Amount of	Districts Receiving a	Amount of
in State Aid	Change	Decrease in State Aid	Change
HAZELWOOD	\$15,243,753	WENTZVILLE R-IV	\$(17,979,613)
NORTH KANSAS CITY 74	\$10,973,596	ROCKWOOD R-VI	\$(16,098,036)
RAYTOWN C-2	\$7,559,750	PARK HILL	\$(12,140,559)
INDEPENDENCE 30	\$6,265,645	COLUMBIA 93	\$(12,107,748)
RITENOUR	\$5,815,623	SPRINGFIELD R-XII	\$(9,386,543)
RIVERVIEW GARDENS	\$4,697,744	FRANCIS HOWELL R-	\$(9,312,387)
		III	
FERGUSON-FLORISSANT R-	\$4,331,640	FT. ZUMWALT R-II	\$(9,299,713)
П			
ST. LOUIS CITY AND LEA	\$3,981,854	LEE'S SUMMIT R-VII	\$(6,221,414)
CHARTER SCHOOLS			
CARTHAGE R-IX	\$3,406,877	MEHLVILLE R-IX	\$(4,783,574)
ST. JOSEPH	\$3,289,646	WEBSTER GROVES	\$(4,640,818)

3.3 Demographic Characteristics of School Districts with Revenue Changes

By relying on a static year to calculate local wealth, rather than a dynamic model which regularly updates local effort and adjusts the SAT to maintain a similar level of state funding, the state

provides additional assistance to school districts that experience more growth in assessed valuation. As we might expect, these school districts, on average, are different from other school districts. In Table 6, I present descriptive statistics of school districts that would stand to gain state aid by moving to a dynamic model, districts whose state aid would remain unchanged, and districts that would experience a decline in state aid.

On average, districts gaining and losing state aid under this proposed plan are similar in size. The key difference is in terms of assessed valuation and student characteristics. Districts gaining aid have an assessed valuation per pupil that is 55 percent of the assessed valuation per pupil in school districts losing state aid, on average. Districts gaining aid also tend to have a higher percentage of minority students and a higher percentage of students qualifying for free or reduced price lunches (FRPL). In short, this funding model would provide additional assistance to school districts that are less well-financed and that have a more disadvantaged student body.

Table 6: Descriptive Statistics of School Districts based on Proposed Dynamic Model of

Calculating Local Effort

Carculating Local Lyjon	Districts Gaining	Districts with no	Districts Losing State
	State Aid	Change in State Aid	Aid
Number of Districts	241	164	111
Total Group WADA	478,214	95,668	337,986
Average District	10,509	4,824	10,375
WADA			
Median District	825	215	1,058
WADA	45.5.5	0070	0.00
Average Assessed	\$75.5	\$259.1	\$136.7
Valuation (in			
thousands of dollars)			
Average Percentage	37.6%	26.8%	19.3%
of Minority Students			
Average Percentage	57.1%	40.9%	34.6%
of Students Eligible			
for FRPL			
Average Percentage	52.9%	60.9%	65.9%
of 8 th Graders Scoring			
Proficient or			
Advanced (ELA)			
Average Percentage	26.1%	25.9%	29.5%
of 8 th Graders Scoring			
Proficient or			
Advanced (Math)			

It is important to note the districts that would not gain or lose any revenue under this proposed funding model tend to be more affluent that either of the other two groups, on average. This group also tends to be comprised of relatively smaller school districts. All 164 school districts in this group are currently held-harmless. Their funding does not change by updating to 2018 levels because they are already at the guaranteed minimum assistance that they can expect from DESE.

To change that, we would also have to update the hold-harmless provision. That, currently, is outside the scope of this work.

In the figures that follow, I present scatterplots of the change in revenue, from the current method of using 2005 assessed valuation to determine local effort and the proposed update to 2018 levels and the corresponding change to the SAT, and various district characteristics. In each of these, I remove the school districts who do would not experience a change in revenue. Doing so allows us to visually see more clearly the patterns that emerge from these changes. As the figures make clear, there is a negative relationship between assessed valuation and change in state aid, as AV increases state aid decreases. The relationship between student characteristics and change in aid are less pronounced, but still present clear relationships. The size of the circles indicates the size of the school district.

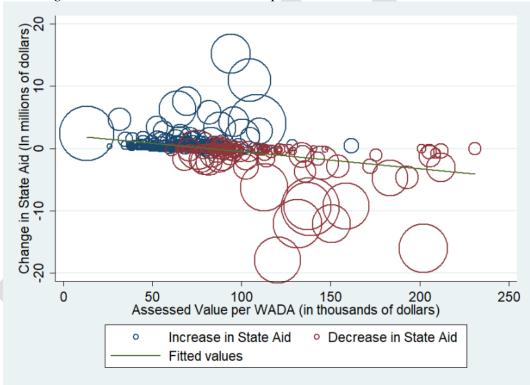


Figure 1: Change in Aid and Assessed Valuation per Wada

Figure 2: Change in Aid and Percent Minority Students

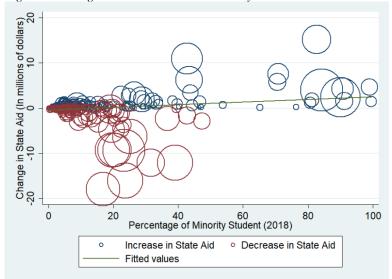


Figure 4: Change in Aid and Percent 8th Graders Scoring Proficient or Advanced, Math

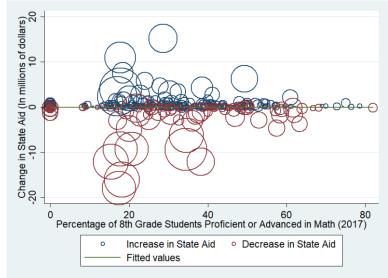


Figure 3: Change in Aid and Percent FRPL Eligible Students

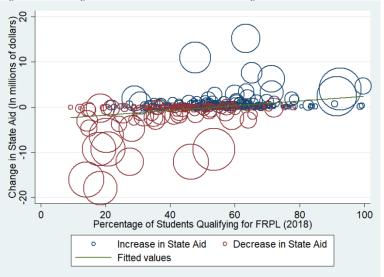
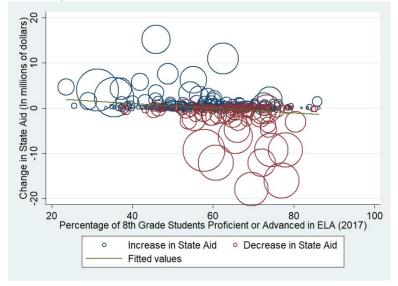


Figure 5: Change in Aid and Percent 8th Graders Scoring Proficient or Advanced, ELA



4.0 Summary and Conclusion

Missouri's foundation formula for public schools determines how much state aid each district will receive. To do this, the formula calculates how much a school district will need to provide an adequate education. It then subtracts how much revenue a school district can raise through local sources, such as property taxes. This is known as local effort. For the past 15 years, the state has calculated local effort based on the assessed value of property from the same year. Despite the fact that property values have increased substantially in almost every school district, this critical piece of the funding formula remains static.

In this paper, I examine the impact of updating the funding formula to rely on 2018 assessed valuations to determine local effort. Not surprisingly, state aid would decline if the formula relied on the current, higher assessed valuation. Indeed, the amount of state aid necessary to fund the foundation formula would decline by \$544 million.

There are two ways to look at this \$544 million. On one hand, it could be argued the state is overfunding the need of some school districts. As their local wealth has increased, state funding could have decreased. This would result in a significant fiscal savings for the state. On the other hand, it could be argued that the state is simply misappropriating these funds. If state lawmakers wanted to keep total state funding steady, they could better distribute these funds by making a modification to another part of the funding formula—the state adequacy target. Doing so, would increase equity in spending among school districts.

I examined which school districts would stand to gain and which would lose state aid if the foundation formula were adjusted to rely on 2018 assessed valuation and the state adequacy target was increased. The results are clear. The winners from this type of change are, on average, poorer school districts with lower assessed valuations and more minority students. Conversely, it could be said the school districts that profit from the current static method of calculating state aid tend to be more affluent school districts.

When the Missouri legislature passed the current foundation formula into law, pegging local effort to the assessed valuation of a fixed point in time may have been a rational course of action. After all, they were very close to that point in time. As we move further away, however, and assessed values change heterogeneously among school districts, this method of funding schools becomes increasingly irrational. It favors school districts that are vibrant and growing, school districts that are experiencing larger increases in assessed valuation. The formula favors these districts to the detriment of higher poverty school districts.

 $^{^{1}\} http \underline{s://www.senate.mo.gov/05info/BTS\ Web/Bill.aspx?SessionType=R\&BillID=10668}$

² See Missouri Revised Statute 163.031: http://www.moga.mo.gov/statutes/C100-199/1630000031.HTM

³ Special thanks to>>>>>>



AN ANALYSIS OF THE KIRWAN COMMISSION RECOMMENDATIONS



The Maryland Public Policy Institute

Published by
The Maryland Public Policy Institute
One Research Court, Suite 450
Rockville, Maryland 20850
240.686.3510
mdpolicy.org

Copyright © 2018

Nothing written here is to be construed as the official opinion of the Maryland Public Policy Institute or as an attempt to aid or hinder the passage of any bill before the Maryland General Assembly.

AN ANALYSIS OF THE KIRWAN COMMISSION RECOMMENDATIONS

INTRODUCTION

From 1998 to 2014, Maryland public schools increased spending on operating expenses by \$6.47 billion—an increase of \$3.8 billion in inflation-adjusted dollars. If the state follows the recommendations presented by the Kirwan Commission, a statewide panel that is reevaluating Maryland public school funding, taxpayers can expect to see education spending continue to increase at a rapid rate in the years to come.

The commission has called for an expansion of pre-K programs, increased teacher pay, more rigorous certification requirements for teachers (including pre-K teachers), and a series of other reforms and initiatives. The exact cost of the commission's recommendations is unknown at the moment, but will likely require billions more in funding for Maryland's public schools.

The Maryland legislature established the Commission on Innovation and Excellence in Education in 2016. The Commission, comprised of 25 individuals appointed by various policymakers and education organizations, is also called the Kirwan Commission in recognition of commission chair William E. (Brit) Kirwan, who was chosen by the governor, senate president, and house speaker. Other members of the committee include Chester Finn, appointed by the president of the state board of education, and Elizabeth Ysla Leight, appointed by the Maryland PTA.¹

Lawmakers established the commission for two reasons. First was to "review the findings of the Study on Adequacy of Funding for Education in the State of Maryland." In 2000 and 2001, Augenblick, Palaich and Associates conducted an adequacy study for the state. The report provided suggestions for revising the state's funding system. Following the release of the report, the legislature passed the Bridge to Excellence in Public Schools Act 2002. That legislation led to a new funding formula and a significant increase in education funding.

The act also called for a follow-up study to be conducted approximately 10 years after the act was established.³ The follow-up study, also conducted by Augenblick, Palaich and Associates, was released in 2016. The Study on Adequacy report called for an increase of \$2.9 billion in state and local dollars—a 29

TABLE I	COMPARISON	OF 2015 PER PUPIL REVENUE	, nominal and cost-ai	DJUSTED
STATE/DIS	TRICT	NOMINAL REVENUE PER PUPIL	RANKING BASED ON NOMINAL REVENUE PER PUPIL	RANKING BASED ON COST-ADJUSTED REVENUE PER PUPIL
DISTRICT C	F COLUMBIA	\$26,487	1	1
NEW YORK		\$21,317	2	3
NEW JERSE	(\$19,188	3	2
CONNECTI	CUT	\$17,477	4	6
VERMONT		\$17,087	5	5
ALASKA		\$15,885	6	10
WYOMING		\$15,638	7	4
MASSACHU	SETTS	\$15,529	8	17
PENNSYLVA	NIA	\$14,886	9	7
MARYLAND		\$14,744	10	8

percent increase in funding. It also called for various adjustments in the state's funding formula.⁴

The second task of the commission was to "provide recommendations on preparing students in the state to meet the challenges of a changing global economy, to meet the state's workforce needs, to be prepared for postsecondary education and the workforce, and to be successful citizens in the 21st century." To date, the work of the commission has fallen mostly in this second category. In January 2018, the commission released a preliminary report calling on the state to develop initiatives in five key areas:

- Early childhood education
- High-quality teachers and leaders
- College and career readiness pathways
- More resources for at-risk students
- Governance and accountability

The report did not call for a specific level of funding, but given the policies recommended in the report, the cost will be substantial.

The Commission's report suggests that if Maryland were to adopt the policies outlined in the commission's report, such as expanded pre-K programs and increased learning standards, the state's educational achievement would rise to the levels of both Massachusetts and top-performing countries. Unfortunately, the report provides few, if any, citations of the actual efficacy of these suggestions. Given the scope of the recommendations in the report and the immense cost that is sure

to follow, it is important to examine these suggestions with a critical eye.

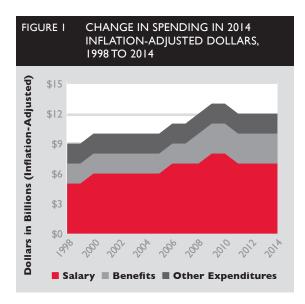
First, this report examines current trends in spending and their impact on policy decisions, showing how Maryland compares with other states in the nation in terms of spending. The focus will be on trends in inflation-adjusted dollars. Next, we examine some of the Kirwan Commission's recommendations. Because of the breadth of the recommendations, which range from birth through college, we will not address each one. Rather, we summarize the major points of each section and offer clarity and questions on specific recommendations. After this, we offer some suggestions that the Commission appears to not have considered. These recommendations include policies that may help achieve the same goals, but at reduced cost or more educational freedom for students or educators

SPENDING IN MARYLAND

Before considering additional spending or new programs, it is important to first understand the context of school funding in Maryland. This section offers some comparisons of Maryland to other states and examines some historical trends in spending within the state. This will allow the reader to examine the proposals of the Kirwan Commission with an understanding of Maryland's current spending situation and past trends. To begin, we compare Maryland's per-pupil spending to other states.

EdBuild, a school finance organization focused on funding equity, reported in 2016 that 2014–15

TABLE 2 COMPARISON OF 2015 STARTING TEACHER SALARIES, NOMINAL AND COST-ADJUSTED **RANKING BASED ON RANKING BASED ON NOMINAL STARTING NOMINAL STARTING** COST-ADJUSTED STARTING STATE/DISTRICT **TEACHER SALARY TEACHER SALARY TEACHER SALARY** DISTRICT OF COLUMBIA \$51,539 9 2 **NEW JERSEY** 2 \$48,631 ALASKA \$44,166 3 16 **NEW YORK** \$43,839 30 WYOMING \$43,269 5 MARYLAND \$43,235 6 4 CONNECTICUT \$42,924 32 PENNSYLVANIA \$41,901 8 10 **CALIFORNIA** \$41,259 9 34 HAWAII 10 \$41,027 42



revenues for Maryland public schools were \$14,744 per pupil,⁷ ranking the state 10th in the nation, behind the District of Columbia and eight other states. For perspective, a classroom of 20 students would generate more than \$295,000. For a class of 25 students, the figure is nearly \$370,000. Based on these figures, Maryland fares relatively well compared with the nation.

The ranking improves when cost of living is factored into the equation, bumping Maryland up to eighth place.⁸ As the Table 1 shows, states spending the most on public education tend to be in the northeastern part of the country, with two exceptions—Alaska and Wyoming. These states

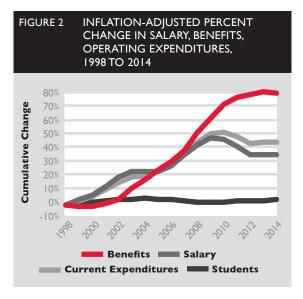
benefit from plentiful natural reserves that have helped bolster state revenues.

Just as the state fares well in comparisons of spending on public education, starting teacher salaries also compare favorably with other states. In 2014–15 the average starting teacher's salary in the state was \$43,235,9 putting the state sixth in the nation. Once again, Maryland moved up in the rankings when cost of living was factored into the analysis. EdBuild placed Maryland fourth in cost-adjusted starting teacher salaries, trailing only Wyoming, New Jersey, and Louisiana. Table 2 displays the states with the highest starting teacher salaries and their cost-adjusted rankings.

Trends in Spending

The National Center for Education Statistics collects state-level spending data. At the time of publication, NCES maintained Maryland data up to 2014. Using these data, we examine trends in Maryland spending. Maryland's strong position in the rankings above can be explained in part by the steady increase in funding over a 10-year period starting in 1998. From 1998 to 2008, Maryland increased education spending an average of 3.8 percent each year in inflation-adjusted dollars (6.7 percent in current dollars).¹⁰

Following the great recession, large increases stopped. When adjusting for inflation, the state saw two years of decreases in funding followed small gains. Overall, inflation- adjusted funding has been flat since 2008.



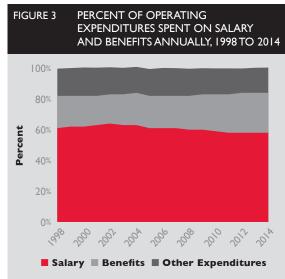


Figure 1 displays changes in operating expenditures over time. ¹¹ Operating expenditures are used for operating expenses such salaries, benefits, and educational supplies. They do not include money spent on facilities or debt servicing. ¹² Two of the biggest pieces of a school's operating expenses are salary and benefits for workers. As such, Figure 1 shows how much of operating expenditures are spent on each of these categories. ¹³ We have adjusted all the previous years' spending figures to account for inflation. The resulting figure shows spending each year in 2014- equivalent dollars.

Pension and Benefits Crowd Out Salary

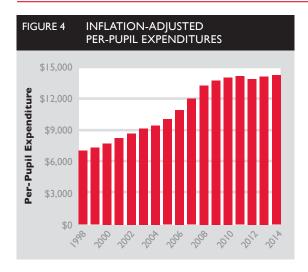
Aside from the overall increases discussed previously, the increase in spending on benefits is significant. "Other expenditures" in Figure 1 refers to any other operating expense that is not included in salaries or benefits. Spending in Maryland far surpassed inflation in the pre-recessionary years, and after a slight dip, has remained relatively steady in recent years. From 1998 to 2014, Maryland increased spending on education by \$3.83 billion in inflation-adjusted dollars. This is an increase of roughly 45 percent during this period of time.

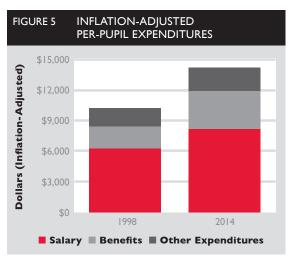
An important trend to note here is that benefits appear to be crowding out salaries. Indeed, from 1998 to 2014, Maryland saw a significant increase in the fraction of operating expenditures that were dedicated to benefits. During this period, total operating expenditures increased by 45 percent (inflation-adjusted) and expenditures on salaries

increased just 36 percent while expenditures on benefits increased 77 percent. Figure 2 shows the percent change in expenditures dedicated to benefits, salary, and total operating expenditures. It also includes the percent change in the number of students.

Figure 3 puts this into greater perspective. It shows the percentage of operating expenditures that were dedicated to salary and benefits in each year. In 1998, 61 percent of all operating expenditures went to salaries, while 21 percent was spent on benefits. In 2014, the amount spent on salary had decreased to 58 percent and that spent on benefits had increased to 26 percent. If the cost of benefits, such as pensions and health care, continues to increase, it may continue to have a substitutionary effect on teacher salaries by shifting compensation from salary to benefits. It may also decrease funding on non-personnel-related items, such as textbooks and supplies.

Some pension payments are not even going to fund the retirement for currently working teachers; they are going to pay down the debt owed to previous teachers. Public pension plans accumulate debt, known as the unfunded actuarial accrued liability. When employees or their employers make contributions to the pension system, a portion of their contributions go to pay down this debt. Bellwether Education Partners estimated that 71.1 percent of Maryland's pension contributions are going toward pension debt. ¹⁴ In other words, the increases in benefits as a percent of ex-





penditures are not going to improve pensions. The additional funds are going to pay down debt.

Increases in Non-Teaching Employees

With increases in spending of \$3.83 billion in inflation-adjusted dollars, we might expect that teacher salaries improved during this time period. However, that does not appear to be the case. Using a slightly longer timeframe, economist Benjamin Scafidi found that Maryland increased perstudent spending in inflation-adjusted dollars by

...Maryland increased perstudent spending in inflationadjusted dollars by 45 percent from 1992 to 2014.

45 percent from 1992 to 2014.¹⁵ However, during this time, average teacher salaries decreased by 2 percent in inflation-adjusted dollars.

The benefits crowd-out noted above is part of the explanation for this. Another explanation is the continual increase in the number of teachers and other staff members. From 1992 to 2015, the pupil teacher ratio decreased from 16.9 to 14.8 as the total number of teachers increased by a substantial 36 percent during this time period. Yet, this was surpassed by a 60 percent increase in all other staff. In short, despite significantly increasing funding for public education, teacher salaries

have not seen commensurate increases. Pension and health care costs have been increasing and school districts have sought to decrease class sizes and hire more support staff. In other words, when given more money, schools have elected to not put the money into pay raises.

Per-Pupil Spending Over Time

Figure 4 shows per-pupil spending from 1998 to 2014 in inflation-adjusted dollars. Similar to the overall picture on operating expenses, we see significant increases following 1998 and then a leveling off after the recession. In 2014, the state spent an average of \$14,217 per pupil.

Next, Figure 5 highlights just 1998 and 2014. The two bar charts illustrate the increase in inflation-adjusted spending during this time period, and how much money is being spent entirely on benefits. In 2014, Maryland spent \$3,709 per student on the benefits of teachers, principals, and staff. That is almost the amount spent in 1998 on benefits and other expenditures.

THE KIRWAN COMMISSION ON INNOVATION AND EXCELLENCE IN EDUCATION

Now that we understand the financial context of Maryland education spending, we shift to considering the recommendations of the Kirwan Commission. The commissions are in five broad areas: early childhood education, high-quality teachers and leaders, college and career readiness pathways, more resources for at-risk students, and governance and accountability. In each of these ar-

eas, the commission offers numerous recommendations. Some recommendations are substantial, others small. Some recommendations are detailed, others not. Here, we examine some of the more prominent recommendations in each area.

The Recommendations

Early Childhood Education

The commission recognizes that "Maryland is widely regarded as a leader in early childhood education in the United States." Nevertheless, the commission believes the state must do a lot more. Their first major recommendation in this area is to expand the "early childhood education program so that all 4-year-olds, regardless of income, have the opportunity to enroll in a full-day program." Four-year-olds from homes earning below 300 percent of the federal poverty line would receive pre-kindergarten services at no cost, while "higher-income families would be expected to pay a portion of the cost." In addition, the state would provide access to full-day early childhood programs for 3-year-olds from low-income families.

The commission says this could be accomplished via public and private providers. However, all providers would be heavily regulated by the state. The state would set internationally benchmarked standards for the state's 3 and 4-year-olds that must be followed in all pre-kindergarten settings. Moreover, the commission suggests the adoption of a statewide testing system for students entering kindergarten.

To help teachers implement the new pre-K standards, the state would create staffing and professional development systems. The commission recognizes that essentially adding a grade level to the public education system will require substantially more certified pre-K teachers. Indeed, the commission calls for all pre-K teachers to be certified. This may preclude many preschools from participating in the state system.

Maryland already has some pre-K programs. To date, no studies have assessed their impact. ¹⁸ Moreover, the commission's report does not mention any analysis that has shown the current service gap. That is, many Maryland families currently enroll their children in pre-K programs, either by paying tuition themselves or by participating in existing public programs. Other families may not desire to enroll their children in pre-K, preferring to keep their children at home with a stay-at-home parent.

We do not know the percentage of families that want pre-K services but are unable to attain the services for their children. This trend, of course, is different from the percentage of families that prefer a free public pre-K option. Without knowing this information, the state cannot know the magnitude of the problem it is attempting to solve. It is likely that a universal program, as described in the commission's report, would greatly increase the size of government and diminish civil society while costing taxpayers billions.

While the body of research on pre-K suggests that high-quality programs can have substantial benefits for students, there are reasons for caution

Very few policy prescriptions are slam dunks, even those that seem to have good research behind them.

before the state implements such a costly strategy. In Tennessee, for example, the state implemented a large scale pre-K program. Researchers conducted a rigorous randomized-control trial to evaluate the impact of the program. While students who attended the pre-K program exhibited early learning gains, the control group consisted of students who did not attend pre-K surpassed the treatment group by second and third grades. This evidence should give policymakers pause before implementing a large-scale program.

Policymakers would be wise to consider the words of caution offered by Grover "Russ" White-hurst of the Brookings Institution before implementing a universal pre-K program:

Don't place big and irrevocable bets on conclusions and recommendations that are far out in front of what a careful reading of the underlying evidence can support. Very few policy prescriptions are slam dunks, even those that seem to have good research behind them. In the early education and care of children, just as in the rest of social policy, we need to be a learning society, prepared to try new approaches to address pressing problems and to learn

systematically from trial and error in their implementation.²⁰

Once a universal program of the type mentioned in the commission's report is created, removing it or changing it will be incredibly challenging. A wise initial step would be to conduct a needs analysis of the current service gap and evaluate the quality of the programs currently in place.

While the commission's recommendations on pre-K are bold, they are just a sampling of recommendations that call for more state involvement in the lives of young children. In addition to pre-K, the commission suggests, families need "free medical care, paid family leave, and free or heavily subsidized child care." Moreover, "In many other countries they also include subsidized housing, parental 'allowances' and baby 'bonuses,' and other financial support." Interestingly, although the commission recognizes these recommendations "may not be explicitly part of its charge," they do not fail to offer them anyway. This should give some hint to the scope and reach of the policies recommended by the commission.

High-Quality Teachers and Leaders

Most scholars recognize that teacher qualification in the classroom is the most important in-school factor impacting student learning. The commission recognizes this and therefore is concerned about the quality of individuals entering the profession in Maryland: "The academic record of the high school students going into teacher education at UMCP [University of Maryland, College Park] are among the lowest of those going into any professional preparation program." ²⁴

Unfortunately, this is not just true in Maryland. Teachers tend to score lower on standardized tests than almost every other major. In 2014, the national average for the SAT was 1497. For test takers who indicated their major would be education, it was just 1438.²⁵ The question is, how do we change this?

Test scores and performance in the classroom are not perfectly correlated.²⁶ Studies have consistently found a positive relationship between tests and the ability to increase student achievement, but the correlation can be rather weak. Some people who score relatively low on tests, such as the ACT or SAT, can be more effective as teachers than others who scored higher. As a result, it is imprac-

tical to simply refer to test scores as a sole proxy for teacher quality.

Here, when we refer to teacher quality, we are talking about a teacher's ability in the classroom. There are only three ways a school can improve the overall quality of teachers—hiring, professional development, and firing. The commission leans heavily on front-end policies. The commissioners want to "mandate that universities improve the quality and rigor of their teacher preparation programs at both the undergraduate and graduate levels." Moreover, the commission says it will hold them accountable for doing so, although, it doesn't say exactly how.

The recommendations here are contradictory. The commission calls both for higher quality, as measured by test scores and similar metrics, and more diversity. There is just one problem with this—these goals are at odds. There is a substantial achievement gap between white and underrepresented minorities in the United States. If a state were to increase the rigor of its licensure exams, this may increase overall quality but at the expense of minority teachers.²⁸ This approach would also likely create a teacher shortage problem.

While it is not inappropriate to consider these front-end policies, Maryland would be much

Studies have consistently found a positive relationship between tests and the ability to increase student achievement, but the correlation can be rather weak.

wiser to consider policies that will help improve teacher development and policies that would remove ineffective teachers from the classroom. The commission's report emphasizes improving professional development, but fails to address tenure and dismissal of low-performing teachers. Economist Eric Hanushek has shown that removing the bottom five to eight percent of teachers and replacing them with a teacher of average quality would help the United States rise to the level of the top countries in math and science.²⁹

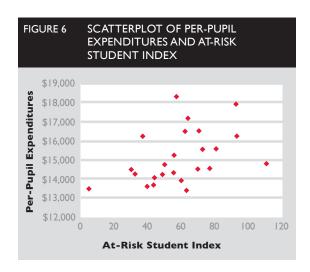
Interestingly, the commission's report attacks alternative certification programs. Policymakers should understand the following regarding alternative teacher certification programs. First, they help address teacher shortages. Second, alternatively certified teachers regularly score higher on standardized tests.³⁰ Third, alternatively certified teachers typically perform on par with traditionally trained teachers.³¹ It is clear that these types of programs attract people who may not have been interested in earning a traditional teaching degree. These programs serve a useful purpose and should not be jettisoned so easily.³²

College and Career Readiness Pathways

One of the strongest and most prevalent recommendations throughout the commission's report is the idea of benchmarking Maryland's education system to internationally benchmarked standards. Keep in mind that Maryland adopted what it considered to be rigorous standards in recent years. Moreover, a recent analysis of Maryland's assessment system, which is based on the standards, suggested that Maryland has the third highest proficiency standard in the country.³³ Nevertheless, the commission wants even tougher standards, writing, "Such systems enable their students to emerge from high school two to three years ahead of where Maryland's typical student is at present and ready for both demanding college-level work and no-less-demanding technologically-demanding careers."34

We all want high standards for students, but this standards-based system of improvement is the same we have seen since the 1990s. Maryland first implemented "consequential accountability" in 1999.³⁵ This was the first year the state attached stakes to student performance on standardized exams. The logic behind this is clear. By setting high standards and backwards-mapping down to the earliest grades, and assessing performance, we can ensure that all children will receive a world-class education. Unfortunately, this strategy was not very successful. According to the commission:

The most recent data from 2017 shows that just under half (49.3 percent) of students taking the English 10 exam received a proficient score (4 or 5) indicating college and career readiness. Further, there are racial and socioeconomic gaps in student perfor-



mance. For example, while 67.5 percent of white students and 77.5 percent of Asian students were proficient, only 29.0 percent of African American students and 34.3 percent of Hispanic students were proficient.³⁶

Despite years of maintaining, and increasing, standards, Maryland students continually fall short of the benchmark:

Maryland was among the first states to develop the Maryland College and Career Ready Standards built on the Common Core State Standards that are measured by the Partnership for Assessment of Readiness for College and Careers (PARCC) tests aligned with the standards. Students are currently expected to reach the Maryland College and Career Ready standard by the end of their junior year, although only about 40 percent of high school students have so far done so.³⁷

Decades of experience should tell us that simply implanting a new set of standards would not yield substantially different results.

More Resources for At-Risk Students

The commission's report calls for more money for at-risk students. This is not a bad idea. Disadvantaged students clearly have more needs than their more affluent peers. The concern is how this looks in practice. The report recognizes that "Maryland has the highest weight in the country for low-in-

come students in its funding formula,"³⁸ yet suggests the state's system is still regressive. This simply does not appear to be the case. Figure 6 plots the state-calculated "At-Risk Student Index" and per-pupil expenditures for each school district.³⁹ There is a clear, positive relationship between the two. This implies that at-risk students in Maryland tend to receive more funding.

Governance and Accountability

The overarching premise permeates the commission's report is that the education bureaucracy in Maryland must grow. Nearly every area calls for a new office of oversight, a new commission, a new task force, or some new entity to measure and monitor the performance of preschools, public schools, and colleges of education. The model presented in the commission's report is one of topdown rules and regulation. The commission suggests the state should create syllabi for each course and lesson plans for teachers. The state should oversee professional development, curriculum adoption, and testing. This type of system will greatly diminish any freedom that teachers have in the classroom and greatly homogenize all of the schools in the state. It also has potential to negatively impact the state's ability to attract teachers.

OTHER IDEAS TO CONSIDER

The cost to implement and comply with the recommendations of the Kirwan Commission will be exorbitant. Some policies will reduce student and teacher freedom and many will simply not work as intended. Below are some alternatives. These are practical solutions intended to address some of the problems listed in the commission's report.

Increasing Teacher Pay

The commission called for an increase in teacher pay and the development of a career ladder that would further allow teachers to increase their pay. In theory, a career ladder, which allows teachers to develop and take on greater responsibilities, sounds like a good idea, but in practice it will likely fail to make the intended impact on student achievement. School administrators notoriously give teachers high ratings.⁴⁰ In states that have implemented teacher evaluation programs, the vast majority of teachers gain high marks. In an analysis of 24 states, most rate less than 1 percent of teachers as unsatisfactory.⁴¹ It seems unlikely

that a career ladder program, with salary implications, would fare much better.

Still, policymakers and school officials can adopt other approaches to increase teacher pay. First, schools should attempt to maintain current staffing levels. As we have seen in the past two decades, the bulk of increased funding has gone to hiring additional teachers and staff. If schools attempt to increase efficiency, by holding class sizes steady or reducing duplicative staff and administration, they could funnel more resources to teacher salaries.

Second, the state should examine opportunities to reform the benefit structure of public educators. Rising pension costs mean more operating expenses are going to pay for the retirement benefits of people already out of the classroom. As previously stated, 71.1 percent of pension contributions go to pay down debt.⁴² If this issue is not addressed, it is likely that pension costs and health care costs will continue to consume more of the operating budget.

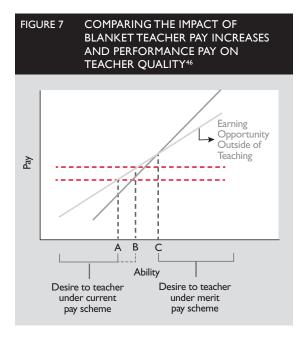
This leaves less for teacher salaries. While benefits are incredibly important, up-front pay is typi-

In states that have implemented teacher evaluation programs, the vast majority of teachers gain high marks.

cally of higher value to workers.⁴³ This means the state may be able to attract and retain more teachers by shifting compensation from benefits to salary.

Increasing Teacher Quality and High-Need Teachers

The proposed solutions in the commission's report would make teacher certification more challenging, but raising the bar is not an automatic path to improving the profession.⁴⁴ Increased requirements also increase teacher shortages and have a minimal impact on teacher quality. A more effective strategy is to remove ineffective teachers. Unfortunately, tenure and other protections make this difficult. Policymakers should provide more support to administrators in this regard.



At the same time, policymakers and school administrators should begin implementing market-based pay, versus merit pay, which pays based on performance, although performance could be considered. Market-based pay allows teachers to earn more money by teaching in high-need subject areas or high-need schools, or by being a highly effective teacher. Currently, most districts pay physics teachers on the same pay scale as elementary school teachers. Yet, an opening for a physics position may get a handful of applicants and the elementary position hundreds. And, the market demands a higher salary for physics teachers.

The same can be said about highly effective teachers. In most professions, including higher education, when a desirable worker gets an offer for another job, their current employer will make a counter-offer. This is not the case in education. Schools make few attempts to keep highly effective teachers.⁴⁵ If we want to attract and retain highly qualified individuals to the teaching profession, we have to create a market for their talent. As long as teachers are paid on a step-and-lane salary schedule, the system will continue to struggle in this area.

The figure below helps explain how market-based pay and merit-pay would help improve the quality of the teacher work force. The blue line indicates that individuals with higher ability tend to earn more money outside of teaching. The solid red line represents the current step-and-lane pay

schedule that pays all teachers the same amount. Under this system, all individuals to the left of Point A would desire teaching, while those to the right would prefer not to teach. In other words, the current system of pay helps us attract individuals from the lower end of the ability spectrum as the commission has noted.

If pay is increased (red dashed line) the number of individuals who would prefer teaching increases (Point B), but the individuals are still drawn from the lower portion of the distribution. The green line represents a system that pays people based on their ability. This type of system has the ability to attract higher skilled workers into the profession and to discourage lower-skilled workers from entering the profession. In short, a merit-based pay system could help increase teacher quality more than blanket pay raises.

Innovation in Education

While the Kirwan Commission's full title included the word "innovation," little about the recommended policies was innovative. Rather, they would create a bureaucratic top-down system that regulates everything from teacher training through pre-school. It is hard for innovation, creation, or entrepreneurial spirit to flourish in this type of environment. Instead, policymakers should consider a different direction that increases educational options for all children.

Nobel-winning economist Milton Friedman said, "A society that puts equality before freedom will get neither. A society that puts freedom before equality will get a high degree of both." Maryland has a tremendous opportunity here. The state can double down on standards-based accountability, increased spending, and top-down control, or begin to allow freedom into public education through market-based approaches such as school choice and market-based pay. Innovation comes through choice and competition, not from standards and tests. Accountability comes when parents vote with their feet on the school that meets their needs, not from arbitrary accountability systems. Job satisfaction for teachers comes from having the freedom to determine the mission and vision in their schools, not a prescribed career-ladder program.

CONCLUSION

In 2002, the Maryland General assembly enacted the Bridge to Excellence in Public Schools Act.

That legislation led to an increase of \$1.3 billion in state aid for public schools in the Old Line State. When coupled with additional state funding, the increases amounted to approximately \$3.6 billion. The Kirwan Commission suggests the additional funding appeared to be working, citing Maryland's top ranking in the Quality Counts rankings for five years in a row.

Yet by the commission's own admission, student achievement in the state is average, "Despite Maryland's investment in pre-K-12 education and the modest progress that has been made, Mary-

Accountability comes when parents vote with their feet on the school that meets their needs, not from arbitrary accountability systems.

land's pre-K-12 system is average at best within the U.S."⁴⁷ In other words, a \$1.3 billion investment has barely made a splash when it comes to improving student outcomes.

Most people would look at these results and conclude that spending more money in the current education system has minimal results, at best, and is a colossal waste of resources at worst. Even the commission alluded to this fact when it said,

Above a certain funding level, *how* the money is spent is at least as important as how much is spent. If that is true, then Maryland must find a way to hold the schools and districts accountable for spending the money in a way that is highly likely to produce the expected result in student performance.⁴⁸

Nevertheless, the commission goes on to offer recommendations for a slew of new programs and initiatives that will cost Maryland taxpayers billions more. The suggestions do not offer systemic change, but aim to repeat failed policies of the past. They are not innovative, nor do they require school districts to reallocate funds.

Public funding for education must come from increased taxes, whether through increased rates

or a more productive economy, or from cuts to other programs. Before marching forward with the commission's suggestions, which will cost untold billions, Maryland policymakers should fully consider the costs and the alternatives.

JAMES V. SHULS is an assistant professor and the graduate program director of educational leadership and policy studies at the University of Missouri, St. Louis. He earned his Ph.D. in education policy from the University of Arkansas. He also holds a bachelor's degree from Missouri Southern State University and a master's degree from Missouri State University, both in elementary education. Prior to joining UMSL, he served as the director of education policy for the Show-Me Institute, where he is currently a distinguished fellow of education policy. Previously, he taught first grade and fifth grade in the Republic, MO R-III School District.

Dr. Shuls' research focuses primarily on teacher labor markets, school finance, and school choice. He has served as an expert witness in the school finance case Martinez/Yazzie v. New Mexico. His research has been published in various scholarly journals such as Social Science Quarterly, The Rural Educator, Educational Policy, the Journal of Education Finance, and the Journal of School Choice: International Research and Reform, where he serves on the editorial board.

- I. For a full list of members, see Commission on Innovation & Excellent in Education, Maryland Manual Online, https://msa.maryland.gov/msa/mdmanual/26excom/ html/13edinnov.html
- 2. Senate Bill 905, Commission on Innovation and Education in Education, http://mgaleg.maryland.gov/2016RS/Chapters_noln/CH_701_sb0905e.pdf
 3.APA Consulting, Final Report of the Study of Adequacy of Funding for Education in Maryland, November 30, 2016, http://marylandpublicschools.org/Documents/adequacystudy/AdequacyStudy/ReportFinal112016.pdf
- 5. Senate Bill 905, Commission on Innovation and Excellence in Education 6. Preliminary Report, Maryland Commission on Innovation & Excellence in Education, January 2018, https://msa.maryland.gov/megafile/msa/speccol/sc5300/sc5339/000113/0 22600/022621/20180174e.pdf
- 7. EdBuild, "Power in Numbers: Cost-Adjusted Revenue," http://viz.edbuild.org/maps/2016/cola/states/
- 8. The Kirwan Commission report suggests that Maryland drops in the rankings when adjusting to regional cost differences (Ch. 6, p. 5). This highlights the importance of the metrics used for this analysis. The report does not suggest how the adjustment was made; therefore we have no way of comparing the methodologies used by EdBuild and the authors of the commission's report.
- 9. EdBuild, "Power in Numbers: Cost-Adjusted Revenue"
- 10.Author's calculation, based on data from U.S. Department of Education, National Center for Education Statistics.
- 11. NCES categorizes operating expenses as "current" expenses.
- 12. Figures that include facilities and debt servicing are known as "total expenditures." 13. Author's calculation, based on data from U.S. Department of Education, National Center for Education Statistics.
- $I4. \ Bellwether \ Education \ Partners, "Maryland," \ 2018, https://www.teacherpensions.org/state/maryland$
- 15. Benjamin Ścafidi, "Back to the Staffing Surge: The Great Teacher Salary Stagnation and the Decades-Long Employment Growth in American Public Schools," EdChoice, May 2017, https://www.edchoice.org/wp-content/uploads/2017/06/Back-to-the-Staffing-Surge-by-Ben-Scafidi.pdf
- 16. Preliminary Report, Maryland Commission on Innovation & Excellence in Education, p. 40
- 17. Ibid, p. 41
- 18. Deborah Phillips, et al., "Puzzling it Out:The Current State of Scientific Knowledge on Pre-Kindergarten Effects;" Brookings Institution, April 17, 2017, https://www.brookings.edu/research/puzzling-it-out-the-current-state-of-scientific-knowledge-on-pre-kindergarten-effects/

- 19. Mark Lipsey, et al., "A Randomized Control Trial of Statewide Voluntary Prekindergarten Program on Children's Skills and Behaviors Through Third Grade," September 29, 2015, https://peabody.vanderbilt.edu/research/pri/PKthrough3rd final_withcover.pdf 20. Grover J. "Russ" Whitehurst, "Rigorous Preschool Research Illuminates Policy (and Why the Heckman Equation May Not Compute," Brookings Institution, May 4, 2017, https://www.brookings.edu/research/rigorous-preschool-research-illuminates-policy-and-why-the-heckman-equation-may-not-compute/
- 21. Preliminary Report, Maryland Commission on Innovation & Excellence in Education, p. 20
- 22. Ibid
- 23. Ibid
- 24. Ibid, p. 45
- 25. Natasha Bertrand, "Here's the Average SAT Score for Every College Major," Business Insider, October 24, 2014, http://www.businessinsider.com/heres-the-average-sat-score-for-every-college-major-2014-10
- 26. See J.V. Shuls and J.R. Trivitt, "Teacher Effectiveness: An Analysis of Licensure Screens," Educational Policy, 29(4), 2015, pp. 645–675
- 27. Maryland Commission on Innovation & Excellence in Education: Preliminary Report (2018), p. 46
- 28. J.V. Shuls, "Raising the Bar on Teacher Quality: Assessing the Impact of Increasing Licensure Exam Cut-Scores," Educational Policy, 0895904816682315, 2016 29. E.A. Hanushek, "The Economic Value of Higher Teacher Quality," Economics of Education Review, 30(3), 2011, pp. 466–479
- 30. J.V. Shuls and J.R. Trivitt, "Teacher Effectiveness: An Analysis of Licensure Screens"; J.V. Shuls and J.R. Trivitt, "Teacher Qualifications and Productivity in Secondary Schools. *Journal of School Choice*, 9(1), 2015, pp. 49–70
- 31. J. Constantine, et al, "An Evaluation of Teachers Trained through Different Routes to Certification. Final Report. NCEE 2009-4043, National Center for Education Evaluation and Regional Assistance, 2009
- 32. Interestingly, the commission's report suggests principals should be allowed to come from outside of education.
- 33. Daniel Hamlin and Paul E. Peterson, "Have States Maintained High Expectations for Student Performance? *Education Next*, Fall 2018, p. 4, http://educationnext.org/have-states-maintained-high-expectations-student-performance-analysis-2017-proficiency-standards/

- 34. Preliminary Report, Maryland Commission on Innovation & Excellence in Education, p. 65
- 35. E.A. Hanushek and M.E. Raymond, "Does School Accountability Lead to Improved Student Performance? Journal of Policy Analysis and Management, 24(2), 2005, pp. 297–337
- 36. Preliminary Report, Maryland Commission on Innovation & Excellence in Education, p. 74
- 37. Ibid, p. 22
- 38. Ibid, p. 74
- 39. Data from "Overview of Education Funding in Maryland," Presentation to the House Ways and Means Committee, Education Subcommittee, Maryland Department of Legislative Services, Office of Policy Analysis, January 23, 2018, http://dls.maryland.gov/pubs/prod/Educ/OverviewOfEducationFundingInMaryland.pdf
- 40. D. Weisberg, et al, "The Widget Effect: Our National Failure to Acknowledge and Act on Differences in Teacher Effectiveness," New Teacher Project, 2009
- M.A. Kraft and A.F. Gilmour, "Revisiting the Widget Effect: Teacher Evaluation Researcher Edition of Teacher Effectiveness, Educational Researcher, 46(5), 2017, pp. 234-249
- 42. Bellwether Education Partners, "Maryland"
- 43. F.D. Fitzpatrick, "How Much Are Public School Teachers Willing to Pay for Their Retirement Benefits?" *American Economic Journal: Economic Policy*, 7(4), 2015, pp. 165–88
- 44. J.V. Shuls, "Raising the Bar on Teacher Quality: Assessing the Impact of Increasing Licensure Exam Cut-Scores," Educational Policy, 0895904816682315, 2016
- 45. Jessica Levin and Meredith Quinn, "Missed Opportunities: How We Keep High-Quality Teachers Out of Urban Classrooms," The New Teacher Project, 2003, https://files.eric.ed.gov/fulltext/ED481608.pdf
- 46. This figure is based on a figure created by C. Kirabo Jackson on Twitter May 31, 2018: "My best attempt to show why performance-based pay is more likely to increase teacher quality than blanket pay raises," https://twitter.com/KiraboJackson/status/1002277700923469824
- 47. Preliminary Report, Maryland Commission on Innovation & Excellence in Education, p. 4 48. Ibid, p. 80-81

ABOUT THE MARYLAND PUBLIC POLICY INSTITUTE

Founded in 2001, the Maryland Public Policy Institute is a nonpartisan public policy research and education organization that focuses on state policy issues. Our goal is to provide accurate and timely research analysis of Maryland policy issues and market these findings to key primary audiences.

The mission of the Maryland Public Policy Institute is to formulate and promote public policies at all levels of government based on principles of free enterprise, limited government, and civil society.

In order to maintain objectivity and independence, the Institute accepts no government funding and does not perform contract research. The Maryland Public Policy Institute is recognized as a 501 (C) (3) research and education organization under the Internal Revenue Code.





Proposal in Regards to RFP Number: BLR – 190003 Education Adequacy Consulting Services

Submitted to the Bureau of Legislative Research, Arkansas

(This copy contains the Official Proposal Price Sheet)

James V. Shuls, Ph.D., Managing Member Shuls and Associates 1720 Briarmanor Dr. Lake Saint Louis, MO 63367 (417) 425-3086

james@shulsassociates.com

Federal Employer ID Number: 84-2853313

September 20, 2019

ATTACHMENT A OFFICIAL PROPOSAL PRICE SHEET

This OPPS is submitted by Shuls and Associates in regards to BLR – 190003.

- This bid is valid for 180 days.
- Prices in this proposal have been arrived at independently, without consultation, communication, or agreement for the purpose of restricting competition.
- No attempt has been made nor will be made by the proposer to induce any other person or firm to submit a proposal for the purpose of restricting competition.
- The person signing this proposal is authorized to represent the company and is legally responsible for the decision as to the price and supporting documentation provided as a result of this RFP.
- Prices in this proposal have not been knowingly disclosed by the proposer and will not be prior to award to any other proposer.

Shuls and Associates

Situation 11550 ctuales				
Description	Price Per Hour	Number of Hours	Number of	Price
			Positions	
James Shuls,	\$195	780	1	\$152,100
Managing				
Member				

Subcontractors

Description	Price
Office for Education Policy	\$169,176
Shaun Simms	\$90,000
Michael Ford	\$10,000
Sara Hodges	\$20,000
Matt Richmond	\$20,000
Travel Expenses	\$15,460
Other (Including copying, editing services, supplies, overhead)	\$22,500
Total Maximum Amount of Bid:	\$499,236

James V. Shuls, Ph.D.

Managing Member

Shuls and Associates (DBA Shuls Policy Consulting)

9/20/2019

APPENDIX E: FISCAL NOTES TESTIMONY



TESTIMONY

February 21, 2017

FISCAL NOTES FOR EDUCATION SAVINGS ACCOUNTS (ESAS) FAIL TO ACCOUNT FOR COST SAVINGS

By James V. Shuls, Ph.D.

Testimony Before the Missouri Senate Education Committee

My name is James V. Shuls, Ph.D. and I am a professor of educational leadership and policy studies at the University of Missouri-St. Louis and a distinguished fellow in education policy at the Show-Me Institute, a nonprofit, nonpartisan Missouribased think tank that supports freemarket solutions for state policy. The ideas presented here are my own. This testimony is intended to explain the errors in the fiscal notes on Senate Bill 32, Senate Bill 313, and any other education savings account bill that fails to account for the potential savings generated by these programs. In this testimony, I simply illustrate how funding of Missouri public schools works and how, as a result of students leaving public schools to participate in a tax credit-funded ESA program, the state would save money.

As a professor, I often have students give only half the answer on a homework assignment or test. Being the generous person that I am, I typically give partial credit. The Fiscal Notes from the Committee

on Legislative Research for Senate Bill 32 and Senate Bill 313 appear to fall within the category of work worthy of only partial credit. Fiscal notes are supposed to capture the net effect a bill might have on the state budget. The fiscal notes for these bills take into account the costs, but fails to consider the potential savings. This incomplete analysis paints a mistakenly bleak picture of the bill's Empowerment Scholarship Accounts.

In the calculations presented below, I use the numbers from SB 32. The findings would be the same for SB 313. As introduced, SB 32 would create Empowerment Scholarship Accounts (ESAs) that any public school student in the state would be eligible for. SB 313 limits eligibility to kindergarteners and students with special needs. The accounts would be funded by donations from individuals and corporations who would receive tax credits for their donations. Table 1 highlights some of the important details of this program.

Table 1: Details of SB 32-Missouri Empowerment Scholarship Accounts Program

Qualified students	Students who attended a public school for 100 days in the prior year or who are entering kindergarten.
Amount of tax credit	100%
Total tax credits offered	\$25 million
Maximum amount of empowerment scholarship account	\$6,241 (State Adequacy Target)

Identifying the costs in this type of program is relatively straightforward, and the fiscal note does an adequate job of doing so. If all of the tax credits are claimed, the state would collect \$25 million less in taxes. Additionally, there would be costs of administering the program and ensuring the funds are used for the intended purpose. The fiscal note suggests this would cost an additional \$465,845, for a total of \$25,465,845.

When it comes to savings, however, the fiscal note simply states that the figure is "unknown." The report notes the program would save money when students transfer from a public school, but fails to quantify this figure.

An Empowerment Scholarship Account program, however, could yield significant savings to offset the costs listed in the fiscal note, and those savings should be part of any analysis of the program.

To understand how the state saves money when a student leaves a public school to use an ESA, it is important to understand how the funding formula works. I provide a basic overview here, but you can go in more depth by reading my primer on the matter.¹

Schools are funded based on the following formula:

Often, reports on the fiscal effects of school choice programs only account for the average amount of state funding per pupil when calculating state savings. According to data from the Department of Elementary and Secondary Education (DESE), the state spent approximately \$3,700 per pupil in 2017. Using this figure to calculate cost savings for the state, however, would greatly underestimate the total amount of money saved by the state. When you understand the formula, it is clear that the state will save the full value of the State Adequacy Target—\$6,241—for every student who transfers from a public school. This figure represents the minimum saved for each student who switches out of the public school system. To better understand this, refer to Table 2.

In the table, you see a district that has one student leave because of the ESA program. As the table illustrates, when one student leaves and lowers the WADA, the state saves the full value of the State Adequacy Target. The district would lose that money, but would typically still have more money per pupil (Line 9). Readers here may be confused by Line 4 and Line 7. Here again I will refer you to my funding formula primer. Suffice it to say that the amount of local effort used in the funding formula is different from the amount of funds actually raised by school districts.



Accordingly, the state saves the full State Adequacy Target for every student who leaves

Table 2: State Savings for One Student Who Leaves the Public School System

Line	Funding Category	Pre-ESA	Post-ESA	State Savings
1	WADA	1,000	999	
2	State Adequacy Target	\$6,241	\$6,241	
3	Total Amount Required (Line 1 × Line 2)	\$6,241,000	\$6,234,759	(Pre – Post) \$6,241
4	Local Effort as calculated in the formula			
	(\$3.43 per \$100 assessed valuation)	\$2,540,000	\$2,540,000	
5	Total State Effort			
	(Line 3 – Line 4)	\$3,701,000	\$3,694,759	
6	State Funding Per Pupil			
	(Line 5 / Line 1)	\$3,701	\$3,698.46	
7	Actual Local Effort (Based on actual property tax rate)	\$5,796,000	\$5,796,000	
8	Local Funding Per Pupil			
o .	(Line 7 / Line 1)	\$5,796	\$5,801.80	
9	Total Spending Per Pupil			
	(Line 6 + Line 8)	\$9,497	\$9,500.26	

Table 3: Potential State Savings Based on WADA

Student Weight Category	Amount Saved Per Student
No weight	\$6,241
FRL (\$6,241 × 1.25)	\$7,801
IEP (\$6,241 × 1.75)	\$10,922
LEP (\$6,241 × 1.6)	\$9,986
FRL + IEP + LEP (\$6,241 × 2.6)	\$16,226

the public school to use an ESA. Actually, the savings would be even higher than this. In my illustration, I assumed the student leaving would only be counted as one student. Our funding formula, however, weights students who have special circumstances, such as those SB 313 is designed to help. The weights are listed below:

- Free or reduced price lunch (FRL)weight = .25
- Individualized Education Plan (IEP) weight = .75
- Limited English Proficiency (LEP)weight = .60

It is possible for a student to be weighted in all three categories, weighting the student at an additional 160%. In other words, a low-income student who is determined to have limited English proficiency and who has an IEP would be counted as 2.6 students. If this student were to use an ESA to leave the public school system, the state would save \$16,226 ($$6,241 \times 2.6$). Table 3 illustrates the potential savings for each type of student.

For every student who leaves the public school system, the state saves between \$6,241 and \$16,226.

The fiscal note for SB 32 states that a total of 4,005 students could transfer under the program and receive the maximum scholarship amount of \$6,241. Based on the evidence presented here, it is easy to see that if each of these students were switching out of the public school system, the savings could offset the cost of the tax credit. If no students were weighted, the cost would just be the costs associated with administration of the program (see Table 4). If some of the students were weighted, the savings could potentially offset even the administrative costs and generate savings for the state.

Keep in mind that even these estimates understate the potential savings. A key piece of the funding formula is the Dollar Value Modifier (DVM). This awards more money to school districts in areas with a higher cost of living. In the Saint Louis area, the DVM is 1.092. As a result, a

Table 4: Cost Savings by Student Weight Category

Student Weight Category	Cost/Savings	
4,005 Students with no weight	(\$470,640)	
4,005 Students with FRL weight	\$5,778,161	
4,005 Students with IEP weight	\$18,275,764	
4,005 Students with LEP weight	\$14,526,483	
4,005 Students with FRL + IEP + LEP weight	\$39,521,688	

regular student switching out of a Saint Louis area school would save the state \$6,815. In Kansas City, the DVM is 1.08. A student from the Kansas City metropolitan area who switches would save the state \$6,704.

Because a large number of students attend school in the Saint Louis and Kansas City metropolitan areas, and these areas have many private schools with available seats, it is reasonable to assume students from these areas would use a non-trivial number of ESAs.³ If we assume none of the students are weighted and one-third of the ESAs (1,335) are used by students from the Saint Louis area, another one-third are from the Kansas City area, and the final third are from an area with a DVM of 1, the program would generate nearly a million dollars in savings. The savings would be substantially more if a portion of the students were weighted as FRL, IEP, or LEP.

CONCLUSION

Because the fiscal note for SB 32 discusses the cost of an ESA program but fails to discuss the potential savings, it only tells part of the story. While it is difficult to put a precise figure on the savings that could be realized from this ESA program, it is not difficult to come up with a simple estimate. If we assume 4,005 students leave the public school system, the savings would offset the cost of the tax credit and the state would only be out administration costs.

It is more likely that the program would generate enough savings over time to outweigh all of the costs associated with the program. The state would realize additional savings as some students would be weighted as FRL, IEP, or LEP and some students would be from school districts where the DVM is greater than 1. It is also important to note that more than 4,005 students could switch because of this program. That number is the maximum number

SHOW-ME INSTITUTE | TESTIMONY

of students who could receive the maximum scholarship. The bill, however, allows for smaller scholarships to be awarded. Other states have experienced significant savings with this type of program.⁴

Clearly, the total estimated cost of the program is not the full \$25,464,845 reported in the fiscal note. Rather, it is more likely that the program will be cost-neutral or will generate significant savings for the state.

James Shuls is a professor of educational leadership and policy studies at the University of Missouri–St. Louis and a distinguished fellow in education policy at the Show-Me Institute

ENDNOTES

- 1. Shuls, James. (2012). A Primer on Missouri's Foundation Formula for K-12 Public Education. Show-Me Institute. Available online at: http://showmeinstitute.org/sites/default/files/FundingFormulaPrimer 9 0.pdf
- 2. Ibid., pages 16-18.
- 3. For more information on Available Seats in Missouri Private schools, view: Shuls, James. V. (2014). Available seats? Survey analysis of Missouri private school participation in potential state scholarship programs. Show-Me Institute. Available at: http://showmeinstitute.org/sites/default/files/Essay_AvailableSeats_Shuls_Jan2014_0.pdf
- 4. Lueken, Martin F. (2016). The tax-credit scholarship audit: Do publicly funded private school choice programs save money? *EdChoice*. Available at: https://www.edchoice.org/wp-content/uploads/2016/10/Tax-Credit-Scholarship-Audit-by-Martin-F-Lueken.pdf

NOTES



5297 Washington Place I Saint Louis, MO 63108 I 314-454-0647 3645 Troost Avenue I Kansas City, MO 64109 I 816-561-1777

Visit Us: Find Us on Facebook: Follow Us on Twitter: showmeinstitute.org facebook.com/showmeinstitute twitter.com/showme

APPENDIX F: CURRICULUM VITAS



James V. Shuls, Ph.D. 212 Marillac Hall 1 University Boulevard St. Louis, MO 63121-4400 Phone: 314-516-6528

Fax: 314-516-5942 shulsj@umsl.edu

PROFESSIONAL EXPERIENCE

University of Missouri – St. Louis (August 2014 – Present)

Assistant Professor, Educational Leadership & Policy Studies

Assistant Department Chair (May 2016 – Present)

Educational Leadership Program Director (May 2016 – Present)

Director responsibilities: Manage the operations for M.Ed., Ed.S., and Ed.D. programs in education leadership. Lead team of 3 faculty members, numerous adjuncts.

The Show-Me Institute, St. Louis, MO (July 2012 – August 2014)

Director of Education Policy (January 2014 – August 2014)

Education Policy Analyst (July 2012 – December 2014)

Republic R-III School District, MO (January 2005 – August 2009)

5th Grade: Math and Social Studies Classroom Teacher

1st Grade: Classroom Teacher

Kindergarten: Summer School Classroom Teacher

2nd Grade Reading Paraprofessional

Missouri Certifications

- Elementary Education, Career CPC, Grades 1-6
- Early Childhood Education, Career CPC, Birth-Grade 3

EDUCATION

Ph.D. in Education Policy, University of Arkansas (2013)

Dissertation: "Do Teacher Characteristics Affect Student Achievement? Evidence from a Rural State"

Committee: Jay P. Greene (Chair/Advisor), Patrick J. Wolf, & Gary W. Ritter

M.S.E. in Elementary Education, Missouri State University (2007)

B.S.E. in Elementary Education, Missouri Southern State University (2004)

OTHER AFFILIATIONS

Distinguished Fellow of Education Policy, Show-Me Institute (2014 – Present)

Fellow, The Hammond Institute at Lindenwood University (2015 – Present)

Fellow, EdChoice (2017 – Present)

Editorial Board, Journal of School Choice (2015 – Present)

RESEARCH INTERESTS

Education policy, labor markets and pay systems, school finance, teacher pensions, educational leadership, & school systems.

SCHOLARLY PRODUCTIVITY

EXPERT WITNESS TESTIMONY

- (1) Yazzie v. State of New Mexico and Martinez v. State of New Mexico. (2017).
 - Hired by state's attorney to analyze plaintiff's reports regarding school finance.

PEER-REVIEWED JOURNAL ARTICLES

- (10) **Shuls, J.V.** & Lux, J. (In Press) Examining the prevalence of salary spiking in a public school teacher defined benefit pension plan. *International Review of Accounting, Banking, and Finance.*
- (9) **Shuls, J.V.** (2018). School choice: The personal and the political. *Journal of School Choice: International Research and Reform*, 12(1), 80-97, DOI 10.1080/15582159.2017.1374151
- (8) **Shuls, J. V.** (2018). Raising the bar on teacher quality: Assessing the impact of increasing licensure exam cut scores. *Educational Policy*. 32(7), 969-992. DOI 10.1177/0895904816682315
- (7) **Shuls, J. V.** (2017). Examining inequities in teacher pension benefits. *Journal of Education Finance*. 42(4), 435-447.
- (6) **Shuls, J.V.** & Trivitt, J. (2015). Teacher qualifications and productivity in U.S. Secondary Schools. *Journal of School Choice: International Research and Reform.* 9(1), 49-70.
- (5) **Shuls, J.V.** & Trivitt, J. (2015). Teacher Effectiveness: An analysis of licensure screens. *Educational Policy*. 29(4), 645-675.
- (4) Bowen, D.H., Buck, S., Deck, C., Mills, J., & **Shuls, J.V.** (2015). Risky Business: An experimental analysis of teacher risk preferences. *Education Economics*. 23(4), 470-480.
- (3) **Shuls, J. V.** (2014). Analysis of superintendent survey responses regarding teacher tenure. *eJournal of Education Policy*, Fall, 1-9.
- (2) **Shuls, J.V.** & Maranto, R. (2014). Show them the mission: A comparison of materialistic and idealistic recruitment incentives in high need communities. *Social Science Quarterly*, 95(1), 239-253.
- (1) Maranto, R. & **Shuls, J.V.** (2012) How to get them on the farm? Efforts to improve rural teacher recruitment and retention in Arkansas. *Rural Educator*. 34(1), n1.

MANUSCRIPTS UNDER REVIEW & IN PROGRESS

- **Shuls, J. V.** & Wolf, P. J. (Revise and Resubmit, *Journal of School Choice*). The School Choice Dilemma
- **Shuls, J. V.** & Tipping, A. (Revise and Resubmit, *Educational Researcher*). Pension winners and losers: How salary schedules create cross-district variation in returns on investments.
- Costrell, R., Hitt, C., & **Shuls, J.V.** (Drafting). Undermining equity: How state pension subsidies favor wealthy school districts.
- **Shuls, J.V.** & Lux, J. (Submitted to the Journal of Education Finance). The impact of the great recession on teacher salaries: Evidence from Missouri."
- Flores, J. & **Shuls, J. V.** (Submitted to the Journal of Educational Leadership and Policy Studies). Improving teacher retention through support and development.
- **Shuls, J.V.** (In progress). Wrong turn in Albuquerque: A critique of professional judgement methods for determining an adequate cost of education.

LAW REVIEW ARTICLES

(1) **Shuls, J.V.** (2018). Financing School Choice: How program design impacts issues regarding legality and equity. *Kansas Journal of Law & Public Policy*. 27(3), 500-514.

EDITOR-REVIEWED PUBLICATIONS

- (4) **Shuls, J.V.**, Hitt, C., & Costrell, R.M. (2019). Undermining equity through state pension subsidies. *Phi Delta Kappan*. 100(8), 37-41.
- (3) **Shuls, J.V.** & Ritter, G.W., (2013). Teacher Preparation: not an either/or. *Phi Delta Kappan*. 94(8), 28-32.
- (2) Ritter, G.W. & **Shuls, J.V.** (2012). If a tree falls in a forest, but no one hears... *Phi Delta Kappan*. 94(3), 34-38.
- (1) Maranto, R. & **Shuls, J.V.** (2011). Lessons from KIPP Delta. *Phi Delta Kappan*. 93(3), 52-56.

BOOK CHAPTERS

(1) **Shuls, J.V.** (2018) School finance in rural America. In McShane, M.Q. & Smarick, A. (Eds.), *No longer forgotten: The triumphs and struggles of rural education in America*. Rowman & Littlefield.

BOOK REVIEWS

- (4) **Shuls, J.V.** (Forthcoming 2019). A dangerous belief. A review essay of "The Education of Eva Moskowitz: A Memoir", by Eva Moskowitz and "Changing the Course of Failure: How Schools and Parents Can Help Low-Achieving Students," by Sandra Stotsky. *Academic Questions*.
- (3) **Shuls, J.V.** (2018). Review of "When school policies backfire: How well-intentioned measures can harm our most vulnerable students" by Michael A. Gottfried and Gilberto Q. Conchas, eds.. *Public Administration Review*, 78(4), 650-651.
- (2) **Shuls, J.V.** (2016). Review of "Work hard, be hard: Journeys through "No Excuses" teaching. *Journal of School Choice: International Research and Reform*, 10(3), 402-403.
- (1) **Shuls, J.V.** (2013). The book that got me to leave the classroom. *Journal of School Choice: International Research and Reform.* 7(3), 424-425.

REPORTS & ESSAYS

- (19) Lueken, M. & **Shuls**, **J.V.** (2018). The future of K-12 funding: How can states fund K-12 education to equalize opportunity and make funding more equitable? *EdChoice*
- (18) **Shuls, J.V.** (2018). Available Seats 2.0: Opportunities abound with private school choice. *Show-Me Institute*.
- (17) McShane, M. Q., Pendergrass, S., & **Shuls, J.V.** (2018). Bryce's law revisited: Serving Missouri's neediest students through targeted scholarships. *Show-Me Institute*.
- (16) **Shuls, J.V.** (2018). An analysis of the Kirwan Commission recommendations. *Maryland Public Policy Institute*.
- (15) McShane, M. & **Shuls, J.V.** (2017). Teachers' opinions on Missouri's public school retirement system. *Show-Me Institute*.
- (14) **Shuls, J.V.** (2017). Is Missouri's teacher pension system unfair? *Show-Me Institute*.
- (13) **Shuls, J.V.** (2017). Values-based education: How education savings accounts provide options. *Texas Public Policy Foundation*.
- (12) Rathbone, M. & **Shuls, J.V.** (2015). Betting on the big returns: How Missouri teacher pension plans have shifted to riskier assets. *Show-Me Institute*.
- (11) Fallon, A. J. & **Shuls, J.V.** (2015). Vacant school buildings: An examination of Kansas City and Saint Louis. *Show-Me Institute*.

- (10) **Shuls, J.V.** (2015). Interdistrict choice for students in failing schools: Burden or boon? *Show-Me Institute*.
- (9) **Shuls, J.V.** with West, C. & Davis, A. (2014). Decentralization through centralization: The story of the recovery school district. *Show-Me Institute*. Case Study, No. 22.
- (8) **Shuls, J.V.** (2014). Available Seats? Survey analysis of Missouri private school participation in potential state scholarship programs. *Show-Me Institute*.
- (7) **Shuls, J.V.** & Barnes, K. (2013). The Power to Lead: Analysis of Superintendent Survey Responses Regarding Teacher Tenure. *Show-Me Institute*.
- (6) **Shuls, J.V.** (2013). Redefining Public Education. *Show-Me Institute*.
- (5) **Shuls, J.V.** (2013). Public Dollars, Private Schools: Examining the Options in Missouri. *Show-Me Institute*.
- (4) **Shuls, J.V.** (2012). A primer on Missouri's foundation formula for K-12 public education. *Show-Me Institute*. Policy Study (35). (*Revised edition, 2017*)
- (3) **Shuls, J.V.** (2012). The salary straitjacket: The pitfalls of paying all teachers the same. *Show-Me Institute*.
- (2) **Shuls, J.V.**, Burks, S. M., & Ritter, G. W. (2012). What do schools look for in prospective teachers? An analysis of teacher application documents? *Office for Education Policy*, Department of Education Reform, University of Arkansas.
- (1) **Shuls, J.V.**, Jensen, N.C., Rose, C.P., Ritter, G.W. (2010). Comprehensive Analysis of Arkansas Teacher Salaries: State, Region, and District. *Office for Education Policy*, Department of Education Reform, University of Arkansas.

EXTERNAL FUNDING

- (5) Laura and John Arnold Foundation. *Undermining equity: How state pension subsidies favor wealthy school districts.* (2018-2020). \$156,930.
 - Co-PIs: Robert Costrell, University of Arkansas Collin Hitt, Southern Illinois University
- (4) The Charles Koch Foundation. *Examining Inequities in Teacher Pension Wealth*. Principal Investigator. (2016-2017). \$30,000
- (3) The Kemper Foundation. *Evaluation of Missouri's Inter-District Transfer Laws*. Principal Investigator. (2014-2015). \$25,000.

- (2) The Walton Family Foundation. *Evaluation of Missouri's Inter-District Transfer Laws*. Principal Investigator. (2014-2015). \$40,000.
- (1) The Walton Family Foundation. *Analysis of private school market in Kansas City and St. Louis*. Principal Investigator. (2013-2014). \$25,000.

Total External Funding: \$276,930

INTERNAL FUNDING

- (2) University of Missouri St. Louis Research Award. *Undermining Equity: A Pilot Study of Illinois Teacher Pension Funding Policy*. Principal Investigator. (2017-2018). \$4, 965.
- (1) University of Missouri Research Board. *Examining Inequities in Teacher Pension Wealth*. Principal Investigator. (2015-2016). \$13,757.

Total Internal Funding: \$18,722

UNFUNDED GRANTS

- (2) Kern Family Foundation. *Infusing Character Education in Leadership Preparation*.
 (2019). Principal Investigator. (2019). Requested amount: \$19,946.
 Co-PI: Vanessa Garry, University of Missouri St. Louis
- (1) Laura and John Arnold Foundation. *Examining Inequities in Teacher Pension Wealth Principal Investigator*. (2015-2016). \$50,282.

ACADEMIC RESEARCH PRESENTATIONS & PANELS

- (31) **Shuls, J.V.,** Hitt, C., & Costrell, R. (2019). Undermining equity: How state pension subsidies favor wealthy school districts. *Presented at the Association for Education Finance and Policy's annual meeting in Kansas City, Missouri.*
- (30) **Shuls, J.V.**, & Lux, J. (2019). Salary Spiking?: How Late Career Raises Lead to Disparity in Pension Benefits. *Presented at the Association for Education Finance and Policy's annual meeting in Kansas City, Missouri*. (Poster Session)
- (29) **Shuls, J.V.**, & Lux, J. (2019). Salary Spiking?: How Late Career Raises Lead to Disparity in Pension Benefits. *Presented at the Midwest Economics Association's annual meeting in St. Louis, Missouri*.
- (28) **Shuls, J.V.,** Hitt, C., & Costrell, R. (2018). Undermining equity: How state pension subsidies favor wealthy school districts. *Presented at the Association for Public Policy Analysis and Management's Annual Conference in Washington D.C.*

- (27) **Shuls, J.V.** & Lux, J. (2018). Salary Spiking?: How Late Career Raises Lead to Disparity in Pension Benefits. *Presented at the Association for Public Policy Analysis and Management's Annual Conference in Washington D.C.* (Poster session).
- (26) DeAngelis, C. A. & **Shuls, J.V.** (2018). School choice benefits teachers too? The effect of school choice programs on teacher salary and employment opportunity. *Presented at the Association for Public Policy Analysis and Management's International Conference in Mexico City*.
- (25) DeAngelis, C. & **Shuls, J.V.** (2018). School choice benefits teachers too? The effect of school choice programs on teacher salary and employment opportunity. *Presented at the Association for Education Finance and Policy's annual meeting*.
- (24) **Shuls, J. V**. & Tipping, A. (2018). Are public pensions regressive? Calculating internal rates of return for public school district salary schedules. *Presented at the Association for Education Finance and Policy's annual meeting*.
- (23) (Invited Presenter) (2018) The Future of Education seminar hosted by the Institute for Humane Studies. Charleston, S.C.
- (22) **Shuls, J. V.** & Tipping, A. (2018). Are public pensions regressive? Calculating internal rates of return for public school district salary schedules. *Presented at the Southern Political Science Association's annual meeting*.
- (21) (Invited Presenter) Rural Education in America: Challenges and Promise. Hosted by the American Enterprise Institute.
- (20) **Shuls, J.V.** (2017). Pension Winners and Losers: How salary schedules impact retirement benefits. *Presented at the Association for Education Finance and Policy's annual meeting.*
- (19) **Shuls, J.V.** (February 2017). Pension Winners and Losers: How salary schedules impact retirement benefits. *Presented at the National Education Finance Conference*.
- (18) **Shuls, J.V.** (June 2016). Examining inequities in teacher pension benefits. *Presented at the Association for Public Policy Analysis and Management's International conference in London.*
- (17) **Shuls, J.V.** (March 2016). Examining inequities in teacher pension benefits. *Presented at the Association for Education Finance and Policy's annual meeting.*
- (16) **Shuls, J.V.** (November 2015). Examining inequities in teacher pension wealth. *Presented at the Association for Public Policy Analysis and Management's annual meeting.*
- (15) **Shuls, J.V.** & Wolf, P.J. (May 2015). School vouchers and racial politics in the U.S.: Explaining the strange bedfellows supporting and opposing private school choice.

- Workshop: Public Opinion and the Political Economy of Education hosted by the Ifo Institute for Economic Research at the University of Munich and the Program on Education Policy and Governance at Harvard University.
- (14) **Shuls, J.V.** (February 2015). Inter-district choice for students in failing schools: Burden or boon? *Presented at the Association for Education Finance and Policy's annual meeting.*
- (13) (Panel Organizer) What is in store for the Common Core?: The politics and policy of implementation. (2015). *Panel Session at the Association for Education Finance and Policy's annual meeting*. Panelists include: Michael Q. McShane, Morgan S. Polikoff, Ashley E. Jochim, **James V. Shuls**, and Andy Smarick (chair).
- (12) **Shuls, J. V.** & Wolf, P. J. (August 2014). School vouchers and racial politics in the U.S.: Explaining the strange bedfellows supporting and opposing private school choice. *Presented at the American Political Science Association's annual meeting.*
- (11) **Shuls, J.V.** (March 2014). Spiking salaries: Analyzing the impact of collective bargaining on teacher salaries and pension benefits. *Presented at the Association for Education Finance and Policy's annual meeting*.
- (10) **Shuls, J.V.** & Trivitt, J. (March 2013). High school, high scores: Analyzing determinants of effectiveness on end-of-course exams. *Presented at the Association for Education Finance and Policy's annual meeting*.
- (9) **Shuls, J.V.** & Galbraith, K. (March 2013). Available seats?: Survey analysis of Missouri private school participation in potential state scholarship programs. *Presented at the Association for Education Finance and Policy's annual meeting.* (Poster session)
- (8) **Shuls, J.V.** & Trivitt, J. (March 2012). What makes a teacher effective?: An analysis of teacher credential's impact on value-added student achievement. *Presented at the Association for Education Finance and Policy's annual meeting*.
- (7) Bowen, D., Buck, S., Mills, J., & **Shuls, J.V.** (March 2012). Risky business: An experimental analysis of teacher risk preferences. *Presented at the Association for Education Finance and Policy's annual meeting*.
- (6) **Shuls, J.V.** & Trivitt, J. (Nov. 5, 2011). Teacher Prep: Examining Determinants of Teacher Effectiveness. *Presented at the Association for Public Policy Analysis and Management's 33rd annual research conference.* (Poster session).
- (5) **Shuls, J.V.**, Maranto, R., & Ritter, G. (April 9, 2011). Overcoming the Geographic Teacher Shortage: Lessons from KIPP Delta. *Presented at the American Educational Research Association's annual meeting*.

- (4) Maranto, R. & **Shuls, J.V.** (April 9, 2011). KIPPnotization: A case study of culture building. *Presented at the American Educational Research Association's annual meeting*.
- (3) **Shuls, J.V.**, Ritter, G., & McGee, J.B. (March 25, 2011). Coming and Going: Selection and Attrition at One KIPP Campus. *Presented at the Association for Education Finance and Policy's annual meeting.* (Poster Session).
- (2) Maranto, R. & **Shuls, J.V.** (Jan. 7, 2011). The first day of KIPP: A case study. *Presented at the Southern Political Science Association's annual meeting.*
- (1) Jensen, N.C., Ritter, G.W., & **Shuls, J.V.** (2010). NWEA assessments and performance pay: A case study of the eSTem Public Charter Schools. *Presented at NWEA Summer Conference, Portland, OR.*

REGIONAL AND LOCAL

- (2) **Shuls, J.V.** (October 2013). Compensation schedules and performance pay. *Presented at the Missouri Charter Public School Association's annual meeting.*
- (1) **Shuls, J.V.** (August 2013). Panelist. *Urban Summit Education Cell Panel*, Kansas City, MO.

INVITED PRESENTATIONS

- (16) **Shuls, J.S.** (May 21, 2019). School Choice 101. *Invited by the U.S. Chamber of Commerce Foundation for their Business Leads Fellowship Program.*
- (15) **Shuls, J.V.** (March 7, 2019). Debating Blaine. *Hosted by the Federalist Society at the University of New Mexico*.
- (14) **Shuls, J.V.** (February 5, 2019). School finance wars: Adequacy strikes back. *Hosted by the Federalist Society at Washburn University*.
- (13) **Shuls, J.V.** (November 2018). School Finance Panel Discussion. *Invited by the Southern Education Foundation to participate in a panel discussion at the organization's annual forum.*
- (12) **Shuls, J.V.** (October 2018). School Accountability. *Invited by EdChoice to present at the State Policy Network's pre-conference workshop*.
- (11) **Shuls, J.V.** (September 2018). School Choice 101. *Invited by the U.S. Chamber of Commerce to present at the Business Leads Fellowship Program in New Orleans.*
- (10) **Shuls, J.V.** (February 2018). Financing school choice: How program design impacts issues regarding legality and equity. 2018 Kansas Journal of Law & Public Policy Symposium, Lawrence, KS.

- (9) **Shuls, J.V.** (December 2017). School Finance in Rural America. As part of the Rural Education in America: Challenges and Promise conference hosted by the American Enterprise Institute.
- (8) **Shuls, J.V.** (November 2017). School Choice as a Means of Integration. *Hosted by the Federalist Society at Saint Louis University*.
- (7) **Shuls, J.V.** (June 2016). Common Core and the Growing Need for Decentralization in Education. *Hosted by the Orange County Federalist Society*.
- (6) **Shuls, J.V.** (February 2016). Debate with Hyman Bass on the Common Core State Standards. *Hosted by the Federalist Society and the Education Policy and Law Society of the University of Michigan*.
- (5) **Shuls, J.V.** (October 2015). Vergara and the Future of Teacher Tenure. *Hosted by the Federalist Society of the University of California, Davis.*
- (4) **Shuls, J.V.** (February 2015). The future of education in Kansas City. (Panelist). *Hosted by the Kansas City Federalist Society*.
- (3) **Shuls, J.V.** (February 2015). Learning to teach in a changing system. *Presented as part of the "What's Current Wednesdays" series hosted by The Current at the University of Missouri St. Louis.*
- (2) **Shuls, J.V.** (October 2014). The Blaine amendment: The school choice barrier from the state of Maine. *Presented at the Annual assembly of the Missouri Catholic Conference*.
- (1) **Shuls, J.V.** (November 2012). The salary straitjacket. *Presented to the Missouri Mathematics and Science Coalition*, Jefferson City, MO.

HONORS AND AWARDS

University of Missouri-St. Louis Junior Faculty Investigator of the Year (2017)

Artinian Travel Award, Southern Political Science Association (2017)

Doctoral Academy Fellow, University of Arkansas (2009 – 2012)

Will Myers Memorial Scholarship, Association for Education Finance and Policy (2012)

Prestage Cook Award, Southern Political Science Association (2011)

Hayek Fund for Scholars Award, Institute for Humane Studies (2011)

Omicron Delta Kappa, National Leadership Honor Society (2003)

Kappa Delta Pi, International Honor Society in Education (2003)

TEACHING AND MENTORSHIP

UNIVERSITY OF MISSOURI – ST. LOUIS

Ed Adm 6000: Charles Fazzaro Leadership Seminar

Ed Adm 6200: Demographic Contexts of Education

Ed Adm 6301: Education Policy Analysis

Ed Adm 6401: School Staff Development and Supervision

Ed Adm 6404: Collective Negotiations in Education Organizations

Ed Adm 6501: Principles of School Finance in Missouri

Ed Adm 6502: School Buildings and Sites

Ed Adm 6503: Organizational Change in Education

Ed Adm 6701: Leadership for Equity

Ed Adm 6706: Diagnostic and Strategic Planning

Ed Rem 6730: Educational Program Evaluation

Ed Rem 6732: Advanced Educational Program Evaluation

UNIVERSITY OF ARKANSAS

CIED 3033: Classroom Learning Theory

CIED 3093: Essentials of Literacy

DOCTORAL DISSERTATION COMMITTEES

- (8) Amy Meeks, Ph.D. (Completed, Aug. 2016). Below the surface of special education administration turnover (Committee Member)
- (7) Kathleen Vierod, Ed.D. (Completed, March 2016). School based mental health as it related to student outcomes (Committee Member)
- (6) Will Armon, Ed.D. (Completed, March 2016). The paradox of impoverished Missouri schools: The school districts in Missouri that need more often get less (Committee Member)
- (5) Cheryl Hermann, Ed.D. (Completed, March 2016). Educational research for children who are Deaf (Committee Member)
- (4) Joycelyn Pugh, Ed.D. (Completed, March 2016). The impact of Every Student Succeeds Act on equitable Title I services for nonpublic school students (Committee Member)
- (3) Katie Rahn, Ed.D. (Completed, March 2016). The early childhood crisis in Missouri: The demand for access to high quality ECE for low-income children (Committee Member)
- (2) Kevin Martin, Ed.D. (Completed, March 2016). Elevating teacher quality: Teacher tenure reform applying lessons from other fields (Committee Member)
- (1) Mary Hardy, Ed.D. (Completed, March 2016). Missouri's missing education policy: Supporting systems for districts with high student mobility rates (Committee Member)

Current doctoral advisees: Josh Flores, Patrick Fisher, Susan Marino, Sarah Ranney, Ashley McMichael, and Kimberly Loomis.

SPECIALIST ADVISEES - COMPLETED

- (11) Michael Zitzer, Ed.S. in Educational Administration (2019). Analysis of school level math curricula. (Committee Chair)
- (10) Shannon Seger, Ed.S. in Educational Administration (2018). Special education administrator internship program: Current practice and opportunities for growth. (Committee Chair)
- (9) Robin Vaulx-Williams, Ed.S. in Educational Administration (2018). Daily writing across the curriculum. (Committee Chair)
- (8) Kimberly Loomis, Ed.S. in Educational Administration (2018). Literature review of grade point average and high school athletic participation. (Committee Member)
- (7) Joshua Flores, Ed.S. in Educational Administration (2018). Retaining teachers: Advice from Missouri's best districts. (Committee Chair)
- (6) Patrick Fisher, Ed.S. in Educational Administration (2018). You're the principal, now what? (Committee Chair)
- (5) Jody Romeo, Ed.S. in Educational Administration (2018). Restorative practices make a difference: Positive change equals positive results. (Committee Member)
- (4) Donald Frazier, Ed.S. in Educational Administration (2018). Building School Culture: Action Research. (Committee Chair)
- (3) Ashley McMichael, Ed.S. in Educational Administration (2017). Improving School Culture: Implementing a Rubric for School Walkthroughs (**Committee Chair**)
- (2) Jeff Tandler, Ed.S. in Educational Administration (2016). High Expectations Yielding High Results in Urban Education. (Committee Chair)
- (1) Richard Regina, Ed.S. in Educational Administration (2015). Descriptive Analysis of Teacher Attendance Patterns in a Suburban Midwestern School District. (Committee Chair)

PROFESSIONAL DEVELOPMENT

LEC Public Policy Conference on Solving the Public Pension Crisis for Law Professors (Accepted to Attend, December 1-2, 2016), George Mason University

University of Missouri Faculty Scholars (2015 – 2016)

SERVICE CONTRIBUTIONS

PROFESSIONAL AFFILIATIONS

Association for Education Finance and Policy (2010 – Present)
American Education Research Association (2011 – 2012, 2015 – 2016)
Association for Public Policy Analysis and Management (2011 – 2012, 2015 – Present)
Missouri Professors of Educational Administration (2015 – Present)

NATIONAL & INTERNATIONAL SERVICE

Peer Reviewer:

Educational Policy, Journal of School Choice: International Research and Reform, The Social Science Journal, The Rural Educator

Volunteer:

Association for Education Finance and Policy annual conference

• Assisted with registration and organized attendance counting (2012 – 2016)

Session Chair:

Midwest Economics Association's annual conference (2019) Association for Public Policy Analysis and Management's annual conference (2015) Association for Education Finance and Policy's annual conference (2015, 2016)

Grant Reviewer:

Office of Public Charter School Financing and Support at the Office of the State Superintendent of Education, Washington D.C. – CS3 Grants, and Replication and Growth Grants. (2011)

DEPARTMENT, COLLEGE, & UNIVERSITY SERVICE

University of Missouri – St. Louis

Faculty Senate, elected college representative (2018 – Present)

Council for Accreditation of Educator Preparation (CAEP) college committee member (2018 – Present)

• Gathering evidence for Standard 1: Content and Pedagogical Knowledge

College Doctoral Research and Travel Awards Committee, committee chair (2018 – Present)

• Evaluates applications and determines award winners

University Spring Research Panel Award Committee, member (2018 – 2019)

• Evaluates internal grant applications and determines award winners

Faculty Affairs Subcommittee on Faculty Research, elected committee member (2017 – Present)

• The committee supports faculty members develop their research agenda by organizing training events, generating scholarly discussions, and supporting grant writing

Graduate Program Director, Education Leadership Studies (2016 – Present)

- Manage admissions process (2015 Present)
- Organized Leadership Speakers Series (2016)
- Oversaw the complete redesign of the M.Ed. program, including the development of 10 new courses (2014 – 2016)
- Reorganized the Ed.S. program
- Liaison, Dept. of Elementary and Secondary Education (2015 Present)

Curriculum and Program Quality Committee, elected department representative (2015 – Present)

- Evaluates and approves all bulletin changes to courses or programs
- Develops and monitors metrics to enhance program quality

Guest Evaluator for Ed.D. Comprehensive Exams (2015)

Search Committee, E. Desmond Lee Endowed Professor of Urban Education (2014)

Proposal Reviewer, *University of Missouri Research Board* (2014, 2017, 2019)

Committee Member, College of Education Graduate Education Committee (2014)

University of Arkansas

Coordinator, Department of Education Reform's Lecture Series (2011 – 2012)

COMMUNITY SERVICE

Appointed by Missouri Senate President Pro Tem Ron Richard to serve on the Personal Finance Working Group tasked with developing new learning standards (2016 – 2017)

Member, St. Louis Public Schools Superintendent's Leadership Advisory Committee (2015 – 2016)

Appointed by Missouri Senate President Pro Tem Tom Dempsey to serve on K-5 committee tasked with developing new learning standards (2014 – 2015)

MEDIA

I have published dozens of opinion editorials. They have appeared in the St. Louis Post-Dispatch, the Arkansas Democrat-Gazette, the Springfield News-Leader, the Springfield Business Journal, the Press of Atlantic City, the Columbia Missourian, the Sedalia Democrat,

the *Columbia Daily Tribune*, *Education News*, the *St. Louis Beacon*, the *St. Louis American*, *Southeast Missourian*, *The 74 Million*, and the *Baltimore Sun*.

From 2013 to 2019, I have appeared on more than 50 radio or television programs. I have made appearances on the following programs: *The Charlie Brennan Show* (KMOX – St. Louis), *The Mark Reardon Show* (KMOX – St. Louis), *The McGraw Milhaven Show* (KTRS – St. Louis), *The Morning Magazine* (KRMS – Lake of the Ozarks), *The Morning Show with Greg Knapp* (KCMO – Kansas City), *KMBZ Live with Darla* Jaye (KMBZ – Kansas City), The *Gary Nolan Show* (KSSZ – Columbia, MO), *Morning Newswatch* (KZRG—Joplin), *Morningline* (KWTO – Springfield, MO), *Mornings with Nick Reed* (KSGF – Springfield, MO), *Stay Tuned* (KETC – St. Louis), *The Jaco Report* (KTVI- St. Louis), *WBAL News Now with Bryan Nehman* (WBAL – Maryland), News (KMBC – Kansas City), News (KSHB – Kansas City), News (Fox4KC – News), *St. Louis Public Radio* (KWMU), Fox 2 News (KTVI).

Joshua B. McGee

201 Graduate Education Building University of Arkansas Fayetteville, AR 72701 Cell: (479) 935-0770 <u>JoshBMcGee@gmail.com</u> <u>JoshMcGee@uark.edu</u> www.JoshBMcGee.com

Current Positions and Affiliations

University of Arkansas

Associate Director, Office for Education Policy, 2019-Present Research Assistant Professor, Department of Education Reform, 2019-Present

Senior Fellow, Manhattan Institute for Policy Research, 2015-Present

Director, Equable Institute, New York, NY, 2018-Present

Director, EdBuild, Jersey City, NJ, 2015-Present

Director, MDRC, New York, NY, 2013-Present

Professional Experience

Laura and John Arnold Foundation

Executive Vice President, 2017-2018

Vice President, March 2011-2017

Chairman, Texas State Pension Review Board, Appointed by Governor Abbott, 2015-2019

Member, Urban Institute-Brookings Tax Policy Center Leadership Council, 2016-2018

Advisory Group Member, Exploring Collaborative Strategies for Clients, Feeding America, 2012

Member, Brookings Institution Advisory Panel on Public Pension Reform, 2013

Advisory Board Member, Houston Education Research Consortium, Rice University, 2011-2018

Adjunct Faculty, Jones Graduate School of Business, Rice University, 2011-2012

Research Associate, Department of Education Reform, University of Arkansas, 2009-2011

Research Assistant, Center for Business and Economic Research, Sam M. Walton College of

Business, University of Arkansas, 2006-2007

Haas Hall Academy (public charter high school)

Headmaster, 2005-2006

Mathematics Instructor, 2004-2006

Education

Ph.D., Economics, University of Arkansas, 2011

M.S., Industrial Engineering, University of Arkansas, 2007

B.S., Industrial Engineering, University of Arkansas, 2003

Refereed Publications

Rethinking the Structure of Teacher Retirement Benefits: Analyzing the Preferences of Entering Teachers (with Marcus Winters), *Educational Evaluation and Policy Analysis*, 41(1), 63-78, March 2019.

- Cross-Subsidization of Teacher Pension Costs: The Case of California (with Robert Costrell), *Education Finance and Policy*, 14(2), 327-354, March 2019.
- How Pensions Contribute to the Premium Paid to Experienced Public School Teachers (with Marcus Winters), *Educational Researcher*, 46(5), 250-258, July 2017.
- Growth Networks (with Raja Kali, Javier Reyes and Stuart Shirrell), *Journal of Development Economics*, 101, 216-227, March 2013.
- When the Best is Mediocre (with Jay Greene), Education Next, 12(1), 35-40, Winter 2012.
- Teacher Pension Incentives, Retirement Behavior, and Potential for Reform in Arkansas (with Robert Costrell), *Education Finance and Policy*, 5(4), 492-518, Fall 2010.
- A Closer Look at Charter Schools and Segregation (with Gary Ritter, Nathan Jensen and Brian Kisida), *Education Next*, 10(3), 69-73, Summer 2010.
- Quantifying the effect of transportation practices in military supply chains (with Manuel Rossetti and Scott Mason), *Journal of Defense Modeling and Simulation*, 2(2), 87-100, April 2005.
- Simulating Transportation Practices in Multi-Indenture Multi-Echelon (MIME) Systems (with Manuel Rossetti and Scott Mason), *Proceedings of the 2004 Winter Simulation Conference*, R.G. Ingalls, M.D. Rossetti, J.S. Smith, and B.A. Peters, eds., Piscataway, New Jersey: Institute of Electrical and Electronics Engineers, 2004.

Policy Briefs, Book Chapters, and Other Publications

- How to Avert a Public-Pension Crisis, National Affairs, Washington D.C., Summer 2019.
- Garden State Crowd-Out: How New Jersey's Pension Crisis Threatens the State Budget, Manhattan Institute (with Steven Malanga), New York, NY, January 2018.
- The Future of Effective Government: Use Evidence, Build Evidence, Repeat (with Erica Brown and Kathy Stack), in *What Matters: Investing in Results to Build Strong, Vibrant Communities*, Federal Reserve Bank of San Francisco, 2017.
- The Never-Ending Hangover: How New York City's Pension Costs Threaten Its Future (with E.J. McMahon), *Report No. 41*, Manhattan Institute, New York, NY, June 2017.
- A Pivotal Moment: Assessing Houston's Plan for Pension Reform (with Paulina Diaz Aguirre), Laura and John Arnold Foundation, Houston, TX, April 2017.
- A Boomtown at Risk: Austin's Mounting Public Pension Debt (with Paulina Diaz Aguirre), Laura and John Arnold Foundation, Houston, TX, November 2016.

- Feeling the Squeeze: Pension Costs Are Crowding Out Education Spending, *Report No. 22*, Manhattan Institute, New York, NY, October 2016.
- The Dallas Public Pension Crisis: A Warning for Cities Across Texas (with Paulina Diaz Aguirre), Laura and John Arnold Foundation, Houston, TX, October 2016.
- Better Pay, Fairer Pensions III The Impact of Cash-Balance Pensions on Teacher Retention and Quality (with Marcus Winters), *Report No. 15*, Manhattan Institute, New York, NY, June 2016.
- Chicago Crowd-Out: How Rising Pension Costs Harm Current Teachers—and Students, *Issue Brief No. 52*, Manhattan Institute, New York, NY, May 2016.
- Modeling Pension Benefits (with Michelle Welch), Urban Institute, Washington, D.C., March 2016.
- Rewarding Experienced Teachers: How Much Do Schools Really Pay? *Civic Report No. 104*, Manhattan Institute, New York, NY, October 2015.
- Swamped: How Pension Debt Is Sinking the Bayou City (with Michelle Welch), *LJAF Policy Perspective*, Laura and John Arnold Foundation, Houston, TX, August 2015.
- Defined-Contribution Pensions Are Cost-Effective, *Civic Report No. 100*, Manhattan Institute, New York, NY, August 2015.
- Why Government Needs More Randomized Controlled Trials: Refuting the Myths (with Stuart Buck), *LJAF Policy Perspective*, Laura and John Arnold Foundation, Houston, TX, July 2015.
- Risky Retirement: Colorado's Uncertain Future and Opportunities for Reform (with Michelle Welch), *LJAF Policy Perspective*, Laura and John Arnold Foundation, Houston, TX, June 2015.
- School Grades (with Jacob Vigdor), Manhattan Institute, New York, NY, Summer 2015, www.SchoolGrades.org.
- Modernizing Teacher Pensions (with Marcus Winters), National Affairs, Washington D.C., Winter 2015.
- Better Pay, Fairer Pensions II: Modeling Preferences Between Defined-Benefit Teacher Compensation Plans (with Marcus Winters), *Civic Report No. 90*, Manhattan Institute, New York, NY, June 2014.
- State Public Pension Investments Shift Over Past 30 Years (with Michelle Welch and Pew Charitable Trusts staff), Pew Charitable Trusts, Washington, D.C., June 2014.

- Equivalent Cost for Equivalent Benefits: Primary DC Plans in the Public Sector, *LJAF Policy Perspective*, Laura and John Arnold Foundation, Houston, TX, October 2013.
- Kentucky's Successful Public Pension Reform (with Pew Charitable Trusts staff), Pew Charitable Trusts, Washington, D.C., September 2013.
- Better Pay, Fairer Pensions: Reforming Teacher Compensation (with Marcus Winters), *Civic Report No. 79*, Manhattan Institute, New York, NY, September 2013.
- Illinois' Pension Challenges (with Pew Charitable Trusts staff), Pew Charitable Trusts, Washington, D.C., July 2013.
- Montana's Pension Challenges (with Pew Charitable Trusts staff), Pew Charitable Trusts, Washington, D.C., May 2013.
- The Transition Cost Mirage False Arguments Distract from Real Pension Reform Debates, *LJAF Policy Perspective*, Laura and John Arnold Foundation, Houston, TX, March 2013.
- Review of *Whither Opportunity? Rising Inequality, Schools, and Children's Life Chances.* by Greg J. Duncan and Richard J. Murnane (Eds.), *Journal of School Choice*, 7(1), 107-110, 2013.
- The Charges of Racial Segregation in Charter Schools Are Overstated (with Nathan Jensen, Brian Kisida, and Gary Ritter), in *Charter Schools: Opposing Viewpoints*, Margaret Haerens and Lynn M. Zott, eds., Farmington Hills, MA: Greenhaven Press, 2012.
- Houston School Finance Report, *LJAF Policy Perspective*, Laura and John Arnold Foundation, Houston, TX, November 2012.
- Arizona's Pension Challenges (with Pew Charitable Trusts staff), Pew Charitable Trusts, Washington, D.C., November 2012.
- Kentucky's Pension Challenges (with Pew Charitable Trusts staff), Pew Charitable Trusts, Washington, D.C., August 2012.
- Creating a New Public Pension System, *LJAF Solution Paper*, Laura and John Arnold Foundation, Houston, TX, Fall 2011.
- The Global Report Card (with Jay Greene), The George W. Bush Institute, Dallas, TX, Fall 2011, www.globalreportcard.org.
- A Proposal to Change Arkansas' Growth Model under Act 35 (with Jay Greene), Arkansas Department of Education, Little Rock, AR, 2010.

- Estimating Teachers' Behavioral Response to Pension Incentives (with Robert Costrell), *JSM Proceedings*, Business and Economic Statistics Section, Alexandria, VA: American Statistical Association, 2010.
- Quantifying the Effect of Commercial Transportation Practices in Military Supply Chains (with Manual Rossetti and Scott Mason), Air Force Research Laboratory, Dayton, Ohio, 2003.

Working/In-Progress Papers

- An Analysis of the Effect of Consolidation on Student Achievement: Evidence from Arkansas (with Jay Greene and Jonathan Mills), EDRE Working Paper 2013-02.
- Cross-Subsidization Of Teacher Pension Costs: The Impact Of Assumed Market Returns (with Robert Costrell), EDRE Working Paper 2017-19.

Op-Eds

- "Worried about the retirement savings 'crisis' in the U.S.? Don't be," Los Angeles Times, June 21, 2019.
- "Failing to adequately fund pensions harms teachers and taxpayers," Austin American Statesman and Houston Chronicle, May 8, 2019.
- "Teachers strike for higher pay because administration and benefits take too much money," USA Today, February 18, 2019.
- "Pension Plan Fix Is a Sign of Progress," Houston Chronicle, June 9, 2017.
- "Defuse This City Pension Bomb," with E.J. McMahon, New York Daily News, April 29, 2017.
- "The Real Cost of CPS Borrowing: District Now Owes \$38,000 per Student," Crain's Chicago Business, May 25, 2016.
- "Calling Attention to Excellence Among Philadelphia Schools," with Jacob Vigdor, Philadelphia Inquirer, January 15, 2016.
- "Teacher Pension Rules Heavily Favor Longevity," with Marcus Winters, Orange County Register, October 24, 2015.
- "While Rethinking Pensions, Push Fairness Among Teachers," with Marcus Winters, Philadelphia Inquirer, October 20, 2015.
- "The True Teacher-Experience Premium," with Marcus Winters, Education Next, October 6, 2015.
- "Courts Worsen the Pension Mess," Real Clear Policy, August 24, 2015.

- "Here's how to eliminate pension underfunding once and for all," Crain's Chicago Business, August 12, 2015.
- "Returning sense and security to teachers' pensions," Washington Examiner, April 2, 2015.
- "Firefighters pension deal will cost more in long run," Houston Chronicle, March 10, 2015.
- "What accountability ratings don't say about Texas schools," Dallas Morning News, September 24, 2014.
- "Correcting the teacher pension issue," with Marcus Winters, Orange County Register, July 11, 2014.
- "Transition cost not a bar to pension reform," with Andrew Biggs and Michael Podgursky, Pensions and Investments Magazine, January 6, 2014.
- "Reform Teacher Pensions," with Marcus Winters, Philadelphia Inquirer, September 24, 2013.
- "Teacher Pensions That Are Fair To All," with Marcus Winters, New York Daily News, September 8, 2013.
- "Better Pay, Fairer Pensions for Los Angeles Teachers," with Marcus Winters, Los Angeles Daily News, September 6, 2013.
- "Agree on bipartisan, funded pension reform," with David Draine, The Lexington Herald-Leader, March 5, 2013.
- "Voters have spoken. But what did they say?" The Houston Chronicle, June 17, 2012.
- "Suburban Districts Lagging on a Global Scale," with Jay P. Greene, Atlanta Journal Constitution, October 24, 2011.
- "Suburban School Districts Falling Behind," with Jay P. Greene, The Statesman, October 16, 2011.
- "Suburban Schools Post Low Global Grades," with Jay P. Greene, Hartford Courant, October 9, 2011.
- "Suburban Schools Can Use Improvement, Too," with Jay P. Greene, The Oklahoman, October 9, 2011.
- "Suburban Schools Fall Short Globally," with Jay P. Greene, The Sacramento Bee, October 9, 2011.

"Policy Burdens State's Charter Schools," with Brian Kisida, Arkansas Democrat Gazette, November 29, 2009.

Invited Presentations and Testimony (selected)

Volker Alliance and Federal Reserve Bank of Chicago, Conference, September 2018

Harvard, Gathering Storm: The Risks Of State Pension Underfunding, October 2017

Southern Municipal Finance Society, Conference, September 2017

Urban Institute Pay for Success National Symposium, June 2017

J-PAL State and Local Innovation Initiative, Conference, January 2017

White House and Stanford University, Summit on Technology and Opportunity, Nov 2016

PIE Network Members' Meeting & Policy Summit, October 2016

National Federation of Municipal Analysts Advanced Seminar, October 2015

National Council on Teacher Retirement, Conference, October 2015

Louisiana Public Retirement Systems' Actuarial Committee, September 2015

National Governors Association Innovation Summit, September 2015

National Conference of State Legislatures Legislative Summit, August 2015

Pennsylvania Senate Finance Committee, April 2015

White House OSTP and the Coalition for Evidence-Based Policy, Conference, July 2014

Texas Association of Public Employee Retirement Systems, Conference, March 2014

Minnesota Legislative Commission on Pensions and Retirement, January 2014

Illinois Public Pension Fund Association, Conference, October 2013 and 2014

Conference of Consulting Actuaries Annual Meetings, October 2013

The Hoover Institution Leadership Forum, October 2013

Robert F. Kennedy Compass Conference, April 2013

Children at Risk 7th Annual Children's Summit, January 2013

Arizona Defined Contribution and Retirement Study Committee, November 2012

PIE Network Policy Summit, September 2012

Kentucky Retirement System Task Force, multiple meetings between July and December 2012

Council of Chief State School Officers Summer Institute, July 2012

National Governors Association Resource Reallocation Policy Academy, June 2012

University of Chicago Municipal CFO Forum, April 2012

Pelican Institute, Louisiana Legislature Policy Orientation, December 2011

Buckeye Institute, Conference, December 2011

City of Houston Financial Management Taskforce, December 2011

National Conference of State Legislatures Fall Forum, December 2011

Philanthropy Roundtable and State Policy Network, Conference, October 2011

Fordham Institute, Panel, October 2011

George W. Bush Institute, Conference, September 2011

Illinois House Working Group on Public Employee Benefits, September 2011

Harvard Program on Education Policy and Governance, Conference, August 2011

Arkansas Public School Resource Center, Conference, October 2010.

The European Association for Research on Learning and Instruction, Conference, August 2010

NCES Summer Data Conference, July 2010

Academic Conference Presentations (selected)

American Economic Association
Association for Education Finance and Policy
Association for Public Policy Analysis and Management
Econometric Society North American Summer Meetings
Joint Statistical Meetings
National Center for Performance Incentives
Southern Economic Association
Winter Simulation Conference

Funded Research and Fellowships

Principal Investigator, Anonymous, Measuring the Effects of Rising Teacher-Pension Costs on School District Budgets, (\$81,989) 2015-16

Co-Principal Investigator, Walton Family Foundation, School Quality Matrix, (\$240,000) 2009-11

Doctoral Academy Fellowship, University of Arkansas, Aug. 2007 to Dec. 2008

ISEO Summer School Scholarship, summer 2008

Co-Principal Investigator, Arkansas Economic Development Commission Energy Office, Arkansas Energy Data Profile, 2007

Co-Principal Investigator, City of Ozark, 2007

Co-Principal Investigator, Baxter County Library, 2007

Professional Memberships

Association for Education Finance and Policy Association for Public Policy Analysis and Management

CURRICULUM VITAE

July 2019

Robert M. Costrell

Professor of Education Reform and Economics (since August 2006)

Endowed Chair in Education Accountability

201 Graduate Education Building

College of Education and Health Professions

University of Arkansas

Fayetteville, AR 72701

(479) 575-5332 (office)

(617) 851-1798 (cell)

(479) 575-3196 (fax)

costrell@uark.edu

http://www.uaedreform.org/costrell-php/

https://edre.uark.edu/people/faculty/uid/costrell/name/Robert-Costrell/

PERSONAL DATA

Born April 10, 1950, Washington, D.C.; U.S. Citizen

Widower, two children

EDUCATION

University of Michigan, 1968-72: B.A. in Economics, High Distinction, Magna Cum Laude Phi Beta Kappa, Sims Senior Honors Scholarship in Economics

Harvard University, 1972-78: Ph.D. in Economics

Dissertation: "Unemployment, Distribution, and Capacity Utilization on Equilibrium Paths"

Dissertation Chair: Professor Kenneth Arrow

PRIOR GOVERNMENT POSITIONS

Education Advisor to Governor Mitt Romney (2005 – 2006)

Executive Office for Administration and Finance, Commonwealth of Massachusetts:

Chief Economist, Commonwealth of Massachusetts (2003 – 2006)

Director of Research and Development (1999 - 2002).

PRIOR ACADEMIC APPOINTMENTS

University of Massachusetts at Amherst, Department of Economics: Professor (1992 – 2006) Associate Professor (1985 - 1992); Assistant Professor (1978 - 1985); Lecturer (1978).

Boston University, Department of Economics: Visiting Scholar (1993 - 1994)

Brandeis University, Department of Economics: Adjunct Associate Professor (1986).

University of Toronto, Faculty of Management Studies:

Visiting Assistant Professor of Economics and Finance (1982 - 1984).

BOARDS, PANELS, GRANTS, AWARDS

- Laura and John Arnold Foundation, "Undermining Equity: How State Pension Subsidies Favor Wealthy School Districts," co-PI with James Shuls, University of Missouri at St. Louis, 2018-20, \$156,930 (\$80,169 subcontract from UMSL to University of Arkansas)
- Laura and John Arnold Foundation, "Cross-Subsidization of Teacher Pension Normal Cost," 2016-17, \$93,764.
- Bill and Melinda Gates Foundation, "What Teacher Pension Plans Should Report to Their Members...and the Public," 2011-13. \$132,907.

 (Grant awarded, but not completed due to illness and death of my wife; about ½ returned.)
- Education Advisory Committee, Mitt Romney Presidential campaign, 2012.
- Fellow in Education Reform, George W. Bush Institute, Southern Methodist University, Dallas, TX, 2011-2013 (compensated).
- "Analysis of Educator Retirement Benefit Systems in Chicago, Illinois, and Indiana," co-PI, with Michael Podgursky, \$295,000. Joyce Foundation. May 1, 2009 October 31, 2010.
- "Teacher Retirement Benefit Systems and K-12 Education," co-PI, with Michael Podgursky, \$250,000. Smith Richardson Foundation. March 1, 2008-September 30, 2010.
- "Significant Research Award," University of Arkansas, College of Education and Health Professions, 2008-09.
- National Technical Advisory Council, U.S. Dept. of Education (Secretarial appointee), 2008-09.
- "Who's Who in America, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016"
- Senior Research Associate, School Choice Demonstration Project, University of Arkansas, 2006-.
- Massachusetts School Building Authority (designee of the Secretary of Administration and Finance) (2005-06).
- Commissioner (Gubernatorial designee to serve for Secretary of Administration and Finance), Massachusetts Public Employee Retirement Administration Commission (2001-03).
- Advisory Council on Education Stat's, U.S. Dept. of Education (Secretarial appointee) (2001-02).
- Steering Committee, NAEP Economics Framework and Specifications (2001-02).
- Teaching Faculty, Lincoln Institute for Land Policy, Spring 2002, 2006.
- Board of Advisors, MassInsight Building Blocks Program (2001-06).

BOARDS, PANELS, GRANTS, AWARDS (cont'd)

Templeton Foundation Freedom Project (with Jeffrey Sedgwick). For John Templeton Seminar & Lectures on Freedom and Education, University of Massachusetts at Amherst (2000).

Judge, Better Government Competition, Pioneer Institute (1999).

Christian Herter Teaching Award for Service to the University, UMass Republican Club (1999).

Board of Academic Advisors, Pioneer Institute, MA (1999-2006).

Board of Academic Advisors, Thomas B. Fordham Foundation (1998-99).

Gubernatorial Appointee to Massachusetts Taxation Alternatives Commission. (1997-98).

Committee to Review National Standards, a project of the American Enterprise Institute, (1994).

PUBLISHED PAPERS IN REFEREED JOURNALS

- "Cross-Subsidization of Teacher Pension Costs: The Impact of the Discount Rate," *Journal of Pension Economics and Finance*, forthcoming, Version of record online, November 5, 2018.
- (with Josh McGee), "Cross-Subsidization of Teacher Pension Costs: The Case of California," <u>Education Finance and Policy</u>, Spring 2019 (Vol. 14, No. 2), pp. 327-354. <u>Version of record online</u>, 16 November, 2017.
- "The 80 Percent Pension Funding Target, High Assumed Returns, and Generational Inequity,"

 <u>Contemporary Economic Policy</u>, July 2018 (Vol. 36, no. 3), pp. 493-504. Special issue on aging. <u>Version of record online</u>, 7 October, 2016.
- "Accounting for the Rise in Unfunded Public Pension Liabilities: Faulty Counterfactuals and the Allure of Simple Gain/Loss Summations," *Journal of Pension Economics and Finance*, January 2018 (vol. 17, no. 1), pp. 23-45. Version of record online 3 October, 2016.
- "Collective Bargaining and District Costs for Teacher Health Insurance: An Examination of the Data from the BLS and Wisconsin," *Journal of School Choice*, 2015 (vol. 9, no. 4), pp. 578-603.
- (with Jeffery Dean), <u>"The Rising Cost of Teachers' Health Care,"</u> <u>Education Next</u>, Spring 2013 (vol. 13, no. 2), pp. 66-72 (refereed research section); <u>unabridged version</u>.
- (with Josh McGee), "<u>Teacher Pension Incentives, Retirement Behavior, and Potential for Reform in Arkansas</u>," <u>Education Finance and Policy</u>, Fall 2010 (Vol. 5, no. 4), 492-518.
- (with Michael Podgursky), "<u>Distribution of Benefits in Teacher Retirement Systems and their Implications for Mobility</u>," *Education Finance and Policy*, Fall 2010 (Vol. 5, no. 4), 519-557.
- (with Michael Podgursky), "Golden Handcuffs: Teachers who change jobs or move pay a high price," *Education Next*, Winter 2010 (vol. 10, no. 1), pp. 60-66 (refereed research section); unabridged version.
- (with Michael Podgursky), "Peaks, Cliffs and Valleys: The Peculiar Incentives in Teacher Retirement Systems and their Consequences for School Staffing," *Education Finance and Policy*, Spring 2009 (Vol. 4, No. 2), 175-211.
- (with Michael Podgursky), "<u>Teacher Retirement Benefits</u>," <u>Education Next</u>, Spring 2009 (vol. 9, no. 2), pp. 58-63 (refereed research section); <u>unabridged version</u>. Updated quarterly at updated quarterly at https://sites.uark.edu/costrell/
- "Who Gains, Who Loses? The fiscal impact of the Milwaukee Parental Choice Program," *Education Next*, Winter 2009 (vol. 9, no. 1), pp. 62-69 (refereed research section).

PUBLISHED PAPERS IN REFEREED JOURNALS (continued)

- (with Glenn C. Loury), "<u>Distribution of Ability and Earnings in a Hierarchical Job Assignment Model</u>," *Journal of Political Economy*, 118 (December 2004), 1322-1363.
- "Can Centralized Educational Standards Raise Welfare?" *Journal of Public Economics*, 65 (September 1997), 271-293.
- "A Simple Model of Educational Standards," *American Economic Review*, 84 (September 1994), 956-971.
- "Accounting for the Causes and Consequences of Industrial Employment Shift," *Industrial Relations*, 33 (July 1994), 346-364.
- "An Economic Analysis of College Admission Standards," *Education Economics*, 1 (No. 3, 1993), 227-241.
- "Immiserizing Growth with Semi-Public Goods Under Consistent Conjectures," *Journal of Public Economics*, 45 (August 1991), 383-389.
- "Second-Best Subsidies in Monopolistic Competition," *Economics Letters*, 34 (November 1990), 205-209.
- "Consistent Conjectures in Monopolistic Competition," *International Journal of Industrial Organization*, 8 (April 1990), 153-160.
- "Methodology in the 'Job Quality' Debate," Industrial Relations, 29 (Winter 1990), 94-110.
- with Myron J. Gordon, "<u>Keynesian Models of the Short Run and the Steady State</u>," <u>Zeitschrift fÜr Nationalökonomie</u> (Journal of Economics) 48 (1988), 355-373.
- "Interest, Profits, and Suboptimality in a Demand-Constrained Macro Model," *Economic Journal* 96 (December 1986), 919-941.
- with G. DuGuay and G. Treyz, "<u>Labour Substitution and Complementarity Among Age-Sex Groups</u>," <u>Applied Economics</u> 18 (July 1986), 777-791.
- "Equilibrium and Optimality in a Mean-Variance Model," *Rand Journal of Economics* 17 (Spring 1986), 122-132.
- "Equilibrium Unemployment and Excess Capacity in Steady State and Growth Cycles," *Economica* 51 (February 1984), 69-82.
- "Profitability and Aggregate Investment Under Demand Uncertainty," *Economic Journal* 93 (March 1983), 166-181.

PUBLISHED PAPERS IN REFEREED JOURNALS (continued)

- "Overhead Labor and the Cyclical Behavior of Productivity and Real Wages," *Journal of Post- Keynesian Economics* 4 (Winter 1981-82), 277-290.
- "Stability of Zero Production Under Life-Cycle Savings," *Review of Economic Studies* 48 (October 1981), 661-665.

OTHER PUBLICATIONS AND REPORTS

- (with James V. Shuls and Collin Hitt), "<u>How State Pension Subsidies Undermine Equity</u>," *Phi Delta Kappan*, 100(8), 37-41. April 2019.
- Book Review, "Commitment and common sense: leading education reform in Massachusetts," by David P. Driscoll, *Journal of School Choice*, January 2019, Vol. 13, No. 1, 121-124.
- (with Dillon Fuchsman), "Policy Brief: Distribution of Teacher Pension Benefits in Massachusetts: An Idiosyncratic System of Cross-Subsidies," February 2018, report produced under grant for Laura and John Arnold Foundation.
- "Policy Brief: Distribution of Teacher Pension Benefits in California: A Vast System of Cross-Subsidies," January 2018, report produced under grant for Laura and John Arnold Foundation.
- "School Pension Costs Have Doubled over the Last Decade, Now Top \$1,000 Per Pupil

 Nationally," TeacherPensions.org (July 20, 2015) and educationnext.org (July 28, 2015); updated quarterly at https://sites.uark.edu/costrell/
- "<u>District Costs for Teacher Health Insurance: An Examination of the Data from the BLS and Wisconsin</u>," refereed, George W. Bush Institute, *The Productivity for Results Series*, No. 8, January 2015.
- "Teacher Pension Enhancement in Missouri, 1975 to the present," Show-Me Institute, July 2014.
- (with Larry Maloney), "The Big Squeeze: Retirement Costs and School District Budgets. Ohio Pension Reform in Cleveland: New Teachers Beware," Thomas B. Fordham Institute, September 2013.
- (with Larry Maloney), "The Big Squeeze: Retirement Costs and School District Budgets.

 Milwaukee: Saved by Act 10 ... For Now," Thomas B. Fordham Institute, July 2013.
- (with Larry Maloney), "The Big Squeeze: Retirement Costs and School District Budgets. <u>Paying</u> the Pension Price in Philadelphia," Thomas B. Fordham Institute, June 2013.
- (with Michael Podgursky), "<u>Teacher Pension Costs: High, Rising, and Out of Control</u>," blog on *Education Next*, June 25, 2013. updated quarterly at https://sites.uark.edu/costrell/

- "'GASB Won't Let Me': A False Objection to Public Pension Reform," Policy Perspective, Laura and John Arnold Foundation, May 2012.
- "'GASB Won't Let Me': A False Objection to Public Pension Reform," op-ed, Pensions & Investments, June 20, 2012.
- "Interview with Dr. Robert Costrell on Public Employee Unions," Common Good, December 14, 2011.
- "Collective Bargaining Weakens Cities," op-ed, Wall Street Journal, November 23, 2011.
- with Michael Podgursky, "Fixing Teacher Pensions," *Education Next*, Fall 2011, pp. 60-69. (Forum, between Costrell-Podgursky and Christian E. Weller)
- with Michael Podgursky, "Educator Pension Systems Ripe for Reform," Education Week Commentary, April 20, 2011, pages 30-31.
- with Michael Podgursky, "<u>A Modest Proposal for Pension Reform</u>," *The Education Gadfly*, Thomas B. Fordham Institute, and *Education Next*, March 2011.
- with Michael Podgursky, "Reforming K-12 Educator Pensions: A Labor Market Perspective," TIAA-CREF Institute Policy Brief. February 2011.
- "Oh, To Be a Teacher in Wisconsin," op-ed, Wall Street Journal, February 25, 2011.
- "The Fiscal Impact of the Milwaukee Parental Choice Program: 2010-2011 Update and Policy Options," School Choice Demonstration Project Milwaukee Evaluation Report #22, December 2010.
- with Michael Podgursky, "Introduction to 'Rethinking Teacher Retirement Benefit Systems," *Education Finance and Policy*, Fall 2010 (Vol. 5, no. 4), 393-401.
- with Josh McGee, "Teacher Pension Incentives, Retirement Behavior, and Potential for Reform in Arkansas," *JSM Proceedings*, American Statistical Association, 2010.
- with Michael Podgursky, "Yes, We Have no Bananas," blog on *Education Next*, February 8, 2010.
- with Richard W. Johnson and Michael Podgursky, "Modernizing Teacher Retirement Benefit Systems," in *Creating a New Teaching Profession*, edited by Dan Goldhaber and Jane Hannaway, Urban Institute Press, Washington, DC, 2009, Chapter 10.

- With Michael Podgursky, "<u>Teacher Pension Reform: A Way Out of the Impasse</u>," blog on *Education Next*, Nov. 12, 2009.
- "Teacher Pension Reform," video interview with Education Next, Nov. 12, 2009.
- with Michael Podgursky, "Pension Reform Would be Good for Teachers," podcast with *Education Next*, Nov. 12, 2009.
- with Michael Podgursky, "Making Mountains out of Molehills? Let the Reader Decide." A reply to EPI, October 1, 2009,
- with Janet S. Hansen and Michael J. Podgursky, "<u>Teacher Retirement Systems: Research Findings</u>," National Center on Performance Incentives, Research Brief, July 2009.
- "The Fiscal Impact of the Milwaukee Parental Choice Program: 2009 Update," School Choice Demonstration Project Milwaukee Evaluation Report #7, March 2009.
- with Eric Hanushek and Susanna Loeb, "What Do Cost Functions Tell Us About the Cost of an Adequate Education?" *Peabody Journal of Education*, April 2008 (vol. 83, no. 2), 198-223.
- "The Fiscal Impact of the Milwaukee Parental Choice Program in Milwaukee and Wisconsin, 1993-2008," School Choice Demonstration Project Milwaukee Evaluation Report #2, February 2008.
- with Michael Podgursky, "Peaks, Cliffs, and Valleys: The Peculiar Incentives of Teacher Pensions," *Education Next*, Winter 2008 (vol. 8, no. 1), 22-28; <u>unabridged version</u>.
- with Michael Podgursky, "<u>Golden Peaks and Perilous Cliffs: Rethinking Ohio's Teacher Pension System</u>," Thomas B. Fordham Institute, June 2007.
- "The Winning Defense in Massachusetts," refereed chapter in <u>School Money Trials: The Legal Pursuit of Educational Adequacy</u>, Martin R. West and Paul E. Peterson (eds.), Brookings Institution Press, 2007, pp. 278-304.
- with Michael Podgursky, unpublished report for U.S. Department of Education, National Center for Education Statistics, "Teacher Pensions and Retiree Health Insurance: A Review of Available Data and Potential Data Collection." December 2006.
- "Governor Romney's Differentiated Pay Proposals," Rennie Center E-Forum, February 2006.
- "Equity v. Equity: Why Education Week and Education Trust Don't Agree," Education Next 5 (Summer 2005), 77-81.

- "Hancock v. Massachusetts: 'A Steady Trajectory of Progress," <u>Education Next</u> 5 (Summer 2005), 28.
- "Comment on "Test-Based Accountability: The Promise & the Perils," by Tom Loveless, in <u>Brookings Papers on Education Policy 2005</u>, Diane Ravitch (editor), Brookings Institution, Washington, D.C., 27-37.
- "Wrong Answer on School Finances," CommonWealth, Fall 2004, 79-87.
- "School performance isn't just about spending," Boston Globe, October 4, 2004.
- (with James Peyser), "No Money Left Behind: Exploring the Costs of Accountability," *Education Next* 4 (Spring 2004), 22-29.
- (with Kenneth Ardon), "Reform and Rationalization of Local School Aid: A Synthesis of the Best Ideas," Massachusetts Executive Office for Administration and Finance, Policy Brief No.11, May 2002.
- (with Julian R. Betts), "Incentives and Equity Under Standards-Based Reform," in <u>Brookings Papers on Education Policy 2001</u>, Diane Ravitch (editor), Brookings Institution, Washington, D.C., pp. 9-55, 66-73.
- (with Kenneth Ardon), "Reforming Local Aid for Phase Two of Massachusetts Education Reform," Massachusetts Executive Office for Administration and Finance, Policy Report No. 7, April 2001.
- (with Kenneth Ardon), "MCAS and the Rise of Literacy Skills in the Early Grades, 1998-99," Massachusetts Exec Office for Administration and Finance, Policy Report No. 6, Oct. 2000.
- "Discipline-Based Economics Standards: Opportunity and Obstacles," in <u>What's At Stake in the K-12 Standards Wars: A Primer for Educational Policy-Makers</u>, Sandra Stotsky (editor), 2000, Peter Lang Publishers, New York, pp. 169-209.
- Contributor to *Remediation in Higher Education: A Symposium*, Fordham Report Vol. 2, No. 9, July 1998, Thomas B. Fordham Foundation, pp. 23-40.
- "The Property Tax, Choice, and Accountability in Massachusetts K-12 Education: A Minority Report of the Taxation Alternatives Commission," Massachusetts State House, June 1998.
- "Industrial Employment Shift and Wage Growth: Massachusetts and the U.S., 1969-87," <u>New England Economic Indicators</u>, Federal Reserve Bank of Boston, Third Quarter 1989, pp. ivxiii.

- "The Effect of Technical Progress on Productivity, Wages, and the Distribution of Employment," A Report to the National Academy of Sciences' Panel on Technology and Employment, in Richard M. Cyert and David C. Mowery (eds.), *The Impact of Technological Change on Employment and Growth*, Ballinger, Cambridge, MA, 1988, pp. 73-128.
- "The Effects of Industry Employment Shifts on Wage Growth: 1948-1987," Issued by the Joint Economic Committee, U.S. Congress, August 1988.

SELECTED WORKING PAPERS

- "Traditional vs. Cash Balance Pension Plans: The Case of Kansas, the 1st Teacher CB Plan," EdWorkingPaper: 19-92, Annenberg Institute at Brown University: June 18, 2019.
- With Josh McGee, "<u>Cross-Subsidization of Teacher Pension Costs: The Impact of Assumed Market Returns</u>," Social Science Research Network, U of Arkansas Department of Education Reform Working Paper 2017-19: October 30, 2017.
- with Josh McGee, "<u>Cross-Subsidization of Teacher Pension Normal Cost: The Case of CalSTRS</u>," Social Science Research Network, U of Arkansas Department of Education Reform <u>Working Paper 2016-17</u>: October 24, 2016; revised version, <u>Education Finance and Policy</u> forthcoming. <u>Version of record online</u>, 16 November, 2017, DOI: https://doi.org/10.1162/edfp_a_00253
- "The 80 Percent Pension Funding Target, High Assumed Returns, and Generational Inequity,"
 Social Science Research Network, U of Arkansas Department of Education Reform
 Working Paper 2016-04: April 7, 2016; revised version, Contemporary Economic Policy,
 special issue on aging and pensions. Version of record online, 7 October, 2016, DOI:
 10.1111/coep.12200
- "Assessing the Impact of Investment Shortfalls on Unfunded Pension Liabilities: The Allure of Neat, but Faulty Counterfactuals," Social Science Research Network, U of Arkansas Department of Education Reform: Nov. 3, 2015; revised version, *Journal of Pension Economics and Finance*. January 2018 (vol. 17, no. 1), pp. 23-45. Version of record online 3 October, 2016, DOI: http://dx.doi.org/10.1017/S1474747216000159
- "You Can't Get There From Here: Transition Costs to Teacher Pension Reform, Real and/or Imaginary," University of Arkansas and George W. Bush Institute, October 2011.
- with Martin Lueken, "The Simple Analytics of Teacher Pension Funding and Reform," University of Arkansas, March 2011.
- with Joshua McGee, "<u>Teacher Pension Incentives, Retirement Behavior, and Potential for Reform in Arkansas</u>," National Center for Performance Incentives, Conference Paper 2009-10, September 2009. (revised version published in EFP refereed special issue)

SELECTED WORKING PAPERS (continued)

- with Michael Podgursky, "<u>Distribution of Benefits in Teacher Retirement Systems and Their Implications for Mobility</u>," National Center for Performance Incentives, Conference Paper 2009-04, October 2009. (revised version published in EFP refereed special issue) Appears also as <u>CALDER/Urban Institute Working Paper 39</u>, December 2009.
- with Julie Trivitt, "Charter School Participant Effects in Massachusetts," November 2008.
- with Eric Hanushek and Susanna Loeb, 2007, "What Do Cost Functions Tell Us About the Cost of an Adequate Education?" conference paper for From Equity to Adequacy to Choice: Perspectives on School Finance and School Finance Litigation, Show-Me Institute and the Truman School of Public Affairs, University of Missouri-Columbia, Education Working Paper Archives (refereed), December 2007.
- with Michael Podgursky, 2007, "Peaks, Cliffs and Valleys: The Peculiar Incentives in Teacher Retirement Systems and their Consequences for School Staffing," University of Arkansas Education Working Paper Archives (refereed), November 2007.
- with Michael Podgursky, 2007, "<u>Efficiency and Equity in the Time Pattern of Teacher Pension Benefits: An Analysis of Four State Systems</u>," Washington, D.C. The Urban Institute. CALDER Working Paper #6.
- "Massachusetts' *Hancock* Case and the Adequacy Doctrine," Harvard Kennedy School of Government, Rappaport Institute for Greater Boston discussion paper, April 2006; also University of Arkansas Education Working Paper Archives (refereed), August 2006.
- "Are High Standards Good or Bad for Those Who Fail?" October 1999.
- with Glenn C. Loury, "Information and Job-Matching: Is There an Efficiency-Equity Tradeoff?" July 1996.
- with Glenn C. Loury, "Some Welfare Economics of Testing," June 1995.
- "Can National Educational Standards Raise Welfare?" Working Paper 1994-6, University of Massachusetts, Department of Economics (November 1994).
- "A Simple Model of Educational Standards," Working Paper 1992-6, University of Massachusetts, Department of Economics (March 1992).
- "Industrial Employment Shift and Wage Growth, 1948-87," Working Paper 1990-5, University of Massachusetts, Department of Economics (January 1990).
- "The Effects of Industrial and Regional Employment Shifts on Wage Growth: 1969-87," (August 1989).

SELECTED WORKING PAPERS (continued)

- "When Can Technical Progress Reduce Aggregate Productivity?" (July 1987).
- "Equilibrium and Optimal Product Diversity Under Consistent Conjectures with Free Entry," (May 1986).
- "Appropriability of R&D, Efficiency, and Competition, Under Certainty," (revised September 1984).
- "Appropriability, Duplication, and Diversification of R&D Under Competition," (revised June 1984).
- "Rent Acquisition Expenditures and Investment in Macro Models," (June 1982).
- "Anatomy of Market Failures in Research," (March 1982).
- "Symmetric and Asymmetric Price Dynamics," (revised February 1982).
- "Quantity Expectations in Macro Models," (revised February 1982).
- "The Composition of Risky Inventive Activity Under Social and Private Incentives," (Jan. 1982).
- "An Extension of the Class of CES Functions to Some Non-Differentiable Forms," (July 1980).

SELECTED PUBLIC PRESENTATIONS, SEMINARS, PANELS, ETC.

- "Cross-Subsidization of Teacher Pension Costs in Traditional vs. Cash Balance Plans: The Case of Kansas, the First Teacher CB Plan," Association for Education Finance and Policy, Annual Conference, Kansas City, MO, March 21, 2019.
- With Dillon Fuchsman (presenter), "Teacher Attritition and Teacher Pension Costs," Association for Education Finance and Policy, Annual Conference, Kansas City, MO, March 21, 2019.
- (with James Shuls [presenter] and Collin Hitt), "Undermining Equity: How State Pension Subsidies Favor Wealthy School Districts," Association for Public Policy and Management, Fall Research Conference, Washington, DC, November 8-10, 2018; Association for Education Finance and Policy, Annual Conference, Kansas City, MO, March 21, 2019.
- "Arkansas Teacher Retirement Plan: Risks, Redistribution & Remedies," Testimony to Arkansas Legislature, Joint Committee on Public Retirement, September 11, 2018. (video, slides)

- "Cross-Subsidization of Teacher Pension Costs: The Impact of the Discount Rate," invited presentation, "Teacher Pension Workshop: Connecting Evidence-Based Research to Pension Reform," RAND corporation, March 8-9, 2018, Santa Monica, CA.
- (with Josh McGee) "Cross-Subsidization of Teacher Pension Costs: The Impact of Assumed Market Returns," Association for Public Policy and Management, Fall Research Conference, Chicago, IL, November 4, 2017.
- (with Josh McGee) "Cross-Subsidization of Teacher Pension Costs: The Case of California," Association for Education Finance and Policy, Annual Conference, Washington, DC, March 18, 2017.
- "Accounting for the Rise in Unfunded Public Pension Liabilities," CFA (Chartered Financial Analyst) Society of Arkansas, Little Rock, AR, April 8, 2016.
- "The Steady-State Math of the "80 % Standard" and High Assumed Return," Association for Education Finance and Policy, Annual Conference, Denver, CO, March 18, 2016.
- "Pension Reform in Colorado," Secure Futures Colorado, Denver, CO, March 16, 2016.
- "Research Presentation," Pension Collaborative Meeting, NCTQ (National Council on Teacher Quality) and Students First, Denver, CO, March 16, 2016.
- "Assessing the Impact of Investment Shortfalls on Unfunded Pension Liabilities: The Allure of Neat, but Faulty Counterfactuals," Association for Public Policy and Management, Fall Research Conference, Miami, FL, November 12, 2015.
- "Why Did the Costs of the Connecticut Teachers' Pension System Rise So Much?" Association for Education Finance and Policy, Annual Conference, Washington, DC, February 21, 2015.
- "'GASB Won't Let Me': A False Objection to Public Pension Reform," APPAM Fall Research Conference, Baltimore, November 9, 2012; AEFP Annual Conference, Boston, March 17, 2012 (presented on my behalf by Josh McGee).
- "The Fiscal Impact of the Milwaukee Parental Choice Program, 1993-2011," APPAM Fall Research Conference, Baltimore, November 9, 2012. [summary of my work, written and presented by Anna Jacob]
- (with Jeffery Dean), "District Costs for Teacher Health Insurance: An Examination of the Data from the BLS and Wisconsin," George W. Bush Institute, School Productivity Project Conference, Dallas, September 20, 2012.

- "You Can't Get There From Here: Transition Costs to Teacher Pension Reform, Real and/or Imaginary," APPAM Fall meetings, Washington, DC, November 3, 2011.
- Comments on Biggs and Richwine, "Are Public School Teachers Overpaid?" American Enterprise Institute, Washington, DC, November 1, 2011. <u>Audio</u>.
- "Transition Costs: Real and Imaginary," at "Getting from Here to There: Research to Implement Teacher Pension Reform," George W. Bush Institute, Southern Methodist University, September 28, 2011.
- "The Simple Analytics of Teacher Pension Funding and Reform," Association for Education Finance and Policy, Seattle, March 25, 2011.
- "Teacher Retirement Benefits," George W. Bush Institute, Dallas, December 10, 2010. (with Michael Podgursky)
- "Research on State Teacher Pension Systems and Reform," Regional Educational Laboratory Southwest (U.S. Department of Education, Institute of Education Sciences) Governing Board, Dallas, December 3, 2010.
- "Longitudinal Analysis of Teacher Retirement Behavior in Arkansas," NCES Summer Data Conference, July 29, 2010, Bethesda, MD. Invited presentation (with Josh McGee).
- "Teacher Pension Incentives and Distribution of Benefits in Illinois & Chicago," Illinois Project Advisory Committee Meeting, Chicago, February 17, 2010; follow-up presentation on September 30, 2010.
- Comments on "Changes in Firm Pension Policy: The Case of Cash Balance Plan Conversions," Allied Social Science Assn meetings, Atlanta, January 5, 2010.
- "Teacher Pension Incentives and Distribution of Benefits in Indiana," Indiana Project Advisory Committee Meeting, Indianapolis, November 28, 2009; follow-up presentation on May 13, 2010.
- "The Case for Economics in the College Curriculum," remarks for ACTA Press Conference, "What Will They Learn?" August 19, 2009, National Press Club, Washington, DC.
- "Teacher Response to Pension System Incentives: Evidence from Arkansas," presentation to Regional Education Laboratory Southwest (U.S. Department of Education, Institute of Education Sciences) Forum, "Educator Staffing, Quality, and Teacher Retirement Systems," Dallas, July 29, 2009.
- "Using Pension Data: the Case of Arkansas," Fourth Annual U.S. Department of Education, Institute of Education Sciences Research Conference, Washington, D.C., June 8, 2009.

- "Teacher Pensions and Early Retirement," presentation to joint retreat of National Commission on Teaching and America's Future (NCTAF) and Council of Chief State School Officers (CCSSO). George Washington University, Washington, DC, April 28, 2009.
- "Distribution of Benefits in Teacher Retirement Systems and Their Implications for Mobility," National Center for Performance Incentives, Second Annual Conference, "Rethinking Teacher Retirement Benefit Systems, Vanderbilt University, February 19-20, 2009. Also American Education Finance Association, Nashville, March 20, 2009 (refereed).
- (by co-author Joshua McGee), "Teacher Pension Incentives, Retirement Behavior, and Potential for Reform in Arkansas," National Center for Performance Incentives, Second Annual Conference, "Rethinking Teacher Retirement Benefit Systems, Vanderbilt University, February 19-20, 2009; Allied Social Science Association meetings, Atlanta, January 5, 2010; American Education Finance Association, Richmond, March 20, 2010; Joint Statistical Meetings, Vancouver, British Columbia, August 4, 2010.
- "Pension Policy and Teacher Quality," Regional Education Lab Southwest Discussion Forum, Washington, D.C., May 7, 2008.
- "What Do Cost Functions Tell Us About the Cost of an Adequate Education?" From Equity to Adequacy to Choice: Perspectives on School Finance and School Finance Litigation, Show-Me Institute and the Truman School of Public Affairs, University of Missouri-Columbia, October 30, 2007. also Carnegie-Mellon University seminar, Department of Economics and Heinz Public Policy School, December 11, 2007; American Education Finance Association, Denver, April 12, 2008.
- "Incentives of Teacher Pension Benefits: Arkansas and Selected Other States," Arkansas Teacher Retirement System Annual Board Seminar, Heber Springs, AR, June 18, 2007.
- "Public School Finance Under U.S. Fiscal Federalism," special invited dinner lecture, Lincoln Land Institute International Conference on "Land Policies and Fiscal Decentralization," June 3, 2007, Cambridge, Massachusetts.
- "The Case for Teacher Pension Reform," American Legislative Exchange Council (ALEC) Education Task Force, Spring Task Force Summit, Hilton Head, SC, April 27, 2007.
- "Efficiency and Equity in the Time Pattern of Teacher Pension Benefits: An Analysis of Four State Systems" (with Michael Podgursky), annual meeting of American Education Finance Association, Baltimore, March 2007.
- "Significance of Endowed Chair in Education Accountability," investiture ceremony, College of Education and Health Professions, University of Arkansas, January 24, 2007.

- "Systemic Effects of Milwaukee Parental Choice Program on School Finance: Proposed Study," School Choice Demonstration Project Research Advisory Board Meeting, Georgetown University, Dec. 1, 2006
- "Accountability," Discussant and Presenter at University of Arkansas Department of Education Reform Conference, October 2006, Kauffman Conference Center, Kansas City.
- "Massachusetts' *Hancock* Case," Governor Jodi M. Rell's Commission on Education Finance, New Haven, May 2006.
- "Education Reform, Finance & Property Taxes in Massachusetts," Lincoln Land Institute, Cambridge, Massachusetts, May 2006.
- Legislative testimony on Governor Romney's proposed reforms to education funding formula, February March 2006.
- "Merit pay proposals in Massachusetts," panel discussion Harvard Graduate School of Education and Rennie Center, December 2005.
- "Massachusetts' *Hancock* Case and the Adequacy Doctrine," Harvard Kennedy School of Government, Program on Education Policy and Governance, conference "Adequacy Lawsuits: Their Growing Impact on American Education," October 12-14, 2005.
- "Accountability and Education Reform in Massachusetts," Tufts University, April 2005.
- "The *Hancock* Case and Education Reform in Massachusetts: A Post-Mortem and a Pre-Mortem," Harvard Kennedy School of Government, Program on Education Policy and Governance, March 2005. Similar presentation at Lincoln Land Institute, May 2005.
- Fiscal Outlook Panel for Municipal Officials, Rappaport Institute for Greater Boston, Harvard Kennedy School of Government, December 2004.
- "The Hancock Case: What's Adequate and Equitable?" Askwith Education Forum, Harvard Graduate School of Education, November 2004. <u>Video</u>. (and similar forum by MassINC).
- "Equity in School Finance," presentation to annual conference of Massachusetts Associations of Superintendents and School Committees, Worcester, MA, October 2004.
- "Standards and Accountability," discussant at Brookings Institution conference on Hopeful Signs of Change in American Education, May 2004.
- "Will More Resources Help?" panel chair at Harvard Kennedy School conference on 50 Years after Brown, April 2004.

- "Taking Account of Accountability," panelist at Harvard Kennedy School conference on school accountability, June 2002.
- Panelist, "The State of Pre-College Economic Education and Major Issues," National Summit on Economic Literacy, NCEE/Federal Reserve, Washington, May 2002.
- "Policy Research and Development in the Massachusetts Executive Branch: An Insider View," University of Massachusetts, April 2002; Pioneer Institute Board of Academic Advisors, May 2002.
- "Education Reform in Massachusetts: Phase Two," presentation to National Conference of State Tax Judges, Lincoln Institute of Land Policy, March 2002.
- "Education Funding Reform in Massachusetts: Phase Two," presentation to annual conference of Massachusetts Associations of Superintendents and School Committees, Worcester, MA, November 2001 (and other similar forums).
- "Testing Testing: School Accountability in Massachusetts and Beyond," panelist at Harvard Kennedy School conference, October 2001.
- Presenter (with Julian R. Betts), "Incentives and Equity Under Standards-Based Reform," Brookings Papers on Education Policy Conference on Educational Standards, May 2000.
- Invited Participant, Templeton Institute for the Advanced Study of Freedom, Newport, Rhode Island, May 22-30, 1999; Galway, Ireland, June, 2000.
- Co-organizer and Moderator, "Remediation Reform in Higher Education and its Implications for K-12," 3rd Annual Conference of the New England Affiliates of the National Association of Scholars, May 8, 1999, Assumption College, Worcester, MA.
- "Local Control is not Entirely a Myth in Massachusetts," Forum on "Money Matters: Alternatives in Education Funding," by Harvard University's Taubman Center for State & Local Government, and Pioneer Institute for Public Policy Research, September, 1998
- "Information and Earnings Inequality with Skill Complementarity," NBER Income Distribution Small Group Meeting, April 1997 (co-authored with Glenn C. Loury)
- "Information and Job-Matching: Is There an Efficiency-Equity Tradeoff?" NBER 1996 Summer Institute, Income Distribution Workshop (co-authored with Glenn C. Loury).
- "Some Welfare Economics of Testing," NBER 1995 Summer Institute, Income Distribution Workshop (presented by co-author Glenn C. Loury).
- "Can National Educational Standards Raise Welfare?" Wayne State University, November 1994.

- "Centralized vs. Decentralized Educational Standards Under Pooling," Boston University Economics Department, Nov. 1993.
- "Is Open Admission Optimal?" American Economic Association Meetings, Anaheim, January 1993.
- "Wage Impact of Sectoral Shift," Eastern Economic Association Meetings, Boston, March 1988.
- "The Role of Technology, Trade, and Other Factors in the Shift to Service Employment," National Academy of Sciences, Panel on Technology and Employment, January 1986.
- "Equilibrium and Optimality Under Monopolistic Competition," Brandeis, September 1985.
- "Instability of the U.S. Deficit," National University of Singapore, July 1985.
- "Recent Trends in the U.S. Economy," International Trade Research Institute, Beijing; Beijing Institute of Foreign Languages, June 1985.
- "Rents and Suboptimality in Demand-Constrained Macro Model," University of Tokyo, May 1985.
- "Diversification and Duplication of R&D," Canadian Economic Association Meetings, Guelph, Ontario, May 1984.
- "Profitability and Aggregate Investment Under Demand Uncertainty," University of Toronto Workshop on Capital Markets, January 1982.
- "Inflation and the Law of Supply and Demand," Eastern Economic Association Meetings, Montréal, May 1980.

OTHER RECENT PROFESSIONAL ACTIVITIES

- Co-organizer (with James Guthrie, Michael Podgursky, and Josh McGee), "Getting from Here to There: Research to Implement Teacher Pension Reform," Conference, George W. Bush Institute, Southern Methodist University, September 28, 2011.
- Organizer, "Issues in Transition to Pension Reform," Conference, University of Arkansas Department of Education Reform, April 15, 2011.
- Guest co-editor (with Michael Podgursky) of special issue (refereed) of <u>Education Finance and Policy</u>, MIT Press, "<u>Rethinking Teacher Retirement Benefit Systems</u>," Fall 2010 (Vol. 5, no. 4)
- Co-organizer (with Michael Podgursky), National Center for Performance Incentives, Second Annual Conference, "Rethinking Teacher Retirement Benefit Systems, Vanderbilt University, February 19-20, 2009.

COMPENSATED PROFESSIONAL ACTIVITIES

- Retained by Office of the Attorney General of Tennessee, *Shelby County and Hamilton County Boards of Education v. William Haslam, et al* (school finance case), August 2018.
- Retained by New York State Office of the Attorney General, *Maisto v. State of New York* (school finance case), July 2014 February 2015.
- "The Impact of Connecticut Teacher Pensions on School District Budgets," StudentsFirst Institute and EdBuild (successor organization), June 2014 April 2015.
- "Teacher Pension Enhancement in Missouri, 1975 to the present," Show-Me Institute, July 2014.
- Laura and John Arnold Foundation, policy report, "'GASB Won't Let Me," May 2012
- TIAA-CREF Institute, contract to co-author "Reforming K-12 Educator Pensions: A Labor Market Perspective." Completed and released February 2011.
- Subcontract with Fordham Institute for Joyce Foundation-funded project on Fiscal Impact of Teacher Pensions on Selected School Districts, 2013.
- Retained by Connecticut Department of Education on *CCEJF v. Rell* (school finance case), 2011 (withdrew from the case in 2012)
- Subcontract with Public Impact for Mind Trust-funded project on teacher pension obligations and reform proposals for a large Midwestern school district, 2010.

COMPENSATED PROFESSIONAL ACTIVITIES (continued)

- Consult with Regional Education Laboratory Southwest (U.S. Department of Education, Institute of Education Sciences), to help organize Policy Forum, "Educator Staffing, Quality, and Teacher Retirement Benefit Systems," Dallas, July 29, 2009.
- Expert witness in *McCleary*, et. al. v. State of Washington, Washington school finance case, October 2009.
- Consult with MT Attorney General's Office on school finance, May 2008.
- Consult with NH Gov. John Lynch on school finance, May 2007; consult with NH Legislative Cost Commission, October 2007 March 2008; consult with NH Attorney General's Office, September November 2009, November 2010 January 2011.
- Expert witness in *Committee for Educational Equality, et. al. v. State of Missouri, et. al.*, Missouri school finance case, February 2007.
- Expert witness in *Hancock v. Driscoll*, Massachusetts school finance case, November 2003. (testified as Chief Economist for Commonwealth of Massachusetts; no extra compensation)

Joint Economic Committee, U.S. Congress: Contractor (1987-88).

National Academy of Sciences, Panel on Technology and Employment: Contractor (1986)

PROFESSIONAL MEMBERSHIPS

American Economic Association Association for Education Finance and Policy Association for Public Policy Analysis and Management National Association of Scholars

Ph.D. PROGRAM IN EDUCATION POLICY

Director of International Studies, 2016-. Organized "Education Policy in Israel," first University of Arkansas Faculty-Led Study Abroad program in Israel, May 2018.

Founding Graduate Director, Ph.D. program in Education Policy, University of Arkansas, 2006-2011. (First class, Fall 2009)

AREAS OF TEACHING EXPERIENCE

School Finance and Education Policy (Ph.D. level)

Economics of Education (Ph.D. level)

Seminar in Education Accountability (Ph.D. level)

Research Seminar in Education Policy (Ph.D. level)

Econometrics (independent study, masters' level)

Microeconomic Theory at M.B.A., Intermediate and Intro Levels.

Mathematical Methods of Economics at Ph.D. and Undergraduate Level.

Game Theory at Undergraduate Level.

Undergraduate Seminar in Economics of Education.

Theoretical Industrial Organization at Undergraduate Level.

Macroeconomic Theory at Ph.D., M.B.A., and Undergraduate Levels.

Corporate Finance at M.B.A. and Undergraduate Levels.

Money and Banking at Undergraduate Level.

International Trade at Undergraduate Level.

International Monetary Theory at Undergraduate Level.

Freedom and Education (inter-disciplinary course, team taught in Spring 2000, with Professor Jeffrey Leigh Sedgwick, of Political Science, under grant from the John Templeton Foundation's Freedom Project)

Shaun M. Simms, PMP, SA

https://www.linkedin.com/in/shaun-m-simms-pmp/

EDUCATION

- Master of Science in Business Administration Lindenwood University, St. Charles, MO
- Bachelor of Business Administration Lindenwood University, St. Charles, MO

CERTIFICATIONS



AWARDS

- St. Louis Project of the Year, The Bloom Café (2018), PMI Metro St. Louis
- St. Louis Project Leader of the Year (2018), PMI Metro St. Louis

PROFESSIONAL EXPERIENCE

Director, Supply Chain - Express Scripts - St. Louis, MO • April 2019 - Present

Responsible for the Retail Network Strategy & Execution team (PMO), leading the Issue Management team, which is responsible for resolution of both retail network issues and integration issues related to retail networks, and leading the Reporting & Analytics team, responsible for completion of reporting & analysis around our retail networks and integration.

Major accomplishments:

- Built Retail Network Strategy & Execution PMO to lead Retail, Supply Chain, and Enterprise wide strategic projects
- Leader of Patience Assurance Program, creating stability in pricing for insulin (\$25 copay cap for enrolled clients and their members)
 - https://www.nytimes.com/2019/04/03/health/drug-prices-insulin-express-scripts.html
- Program Manager for creation of Switzerland Rebates GPO, Ascent Health Services to drive value to clients and members
- Retail Network Leader for Cigna/ESI integration Early-Go, Med D, and Monthly Migrations
- Project Leadership Series Director, leading workshops for Finance, Operations, Supply Chain, and Product (40+ members)

Director, Finance Strategic Initiatives – Express Scripts - St. Louis, MO • July 2018 – March 2019 Responsible for the Finance Transformation Office, overseeing multi-year strategic initiatives on three separate work streams, while leading the Finance Project Management Office.

- Lead team on a portfolio of 10+ strategic initiates, and 40+ projects with a benefit value of \$20M
- Measures and reports on portfolio's performance to Senior Management
- Team successfully lead the Finance Integration for the Cigna Acquisition
- Change Management Leader, leading workshops for Finance, Operations, and Supply Chain

Sr. Manager, Finance Strategic Initiatives - Express Scripts - St. Louis, MO • July 2017 - July 2018

- Lead team of Project Managers on a portfolio of 15+ projects with benefit value of \$10M
- Leader of multiple large (\$1M+) programs/projects (teams of 20+):
 - Procurement system which manages \$1.5B in indirect spend, resulting in \$28M dollars in savings

P: 636-578-6568

E: Shaun.Simms@Outlook.com

- Lease accounting system to comply with new SEC reporting requirements
- Credit Card Processor Project saving \$1M annually in fees
- Bank Account Restructure Initiative (15 projects 80 members), which reduced banking fees by \$4M, simplified account structures, and implemented strategic banking services
- Selected as Voice of the Employee (VOE) Leader
 - Created process for simultaneous, 10-site trivia contests for 600 employees, while raising money for Toys for Tots (\$5,000) and Walk to End Alzheimer's (\$6,000)
 - Created "Days of Service", where 300 employees volunteered across 5 states with community partners
 - Organized a food drive that raised \$6,000 in food and funds

Program Manager | Sr. Project Manager - Express Scripts - St. Louis, MO - February 2016 - July 2017

- Selected as one of 8 members leading Corporate Systems Agile transition
- Effectively manages multiple complex projects simultaneously through their project lifecycle, both in Waterfall in Agile methodologies (up to \$10M)
- Program manager for our FCO group, representing around \$4M in spend
- Successfully created new processes for benefit realization, project intake

Project Manager | Process Improvement – HD Supply - St. Louis, MO • October 2012 – February 2016

- Direct process improvement initiatives, saving the company 500K
- Leader of SharePoint linear workflows, implementing 20 new processes
- Successfully created process reducing new location opening cycle time by 40 percent
- Compiled industry, demographic, and economic data to create a strategic five-year footprint plan to maximize profitability
- Direct new location growth process from beginning to completion, opening 10 new locations to increase footprint, overseeing \$40M
- Manage Fleet optimization project to improve operational efficiency and profitability, managing \$5M annually
- Created process to better assess the current and long-term capital investment needs of our 250+ nationwide locations, managing \$4M

Project Manager | Process Improvement – Graybar Electric - St. Louis, MO - September 2010 – October 2012

- Leader of Echelon project (software selection, development, implementation), which led to increase of 20 percent in market baskets bid
- Project manager for market segmentation initiative, collecting data, and analyzing market information to create segments, which helped lead to an 11 percent increase in business
- Created data analysis process through pilot program, saving \$1.5M in single district
- Analyzed and renegotiated costs with suppliers, saving nearly \$1.1M
- Work with Business Management team to maintain \$25M in current contracts
- Creatively work with Business Development team to win over \$10M in new strategic national contracts

Cost Analyst | Continuous Improvement - Graybar Electric - St. Louis, MO - May, 2007 - September 2010

- Continuous Improvement project manager for Customer Relations Management process with suppliers to improve communication and reduce process errors by over 70 percent
- Continuous Improvement team leader for department integration, and cost metrics
- Perform daily analysis of department cost changes, including impact on company investment

Auditor – Citigroup – O'Fallon, MO ■ 2003 – 2007

• Prepared and submitted audit findings, making recommendations to management

TECHNICAL KNOWLEDGE

Microsoft Word, Excel, PowerPoint, Office, Project, Visio, Access, SharePoint, JIRA

AFFILIATIONS

- Metro St. Louis Chapter, Project Management Institute (PMI)
 - o Vice President (2016 2020)
 - o Director (2015 2016)
 - o Founder and Leader of our Confluence Event, providing pro bono strategic planning to non-profits
 - o Speaker, North America Leadership Institute Meeting (2017 in Chicago, 2018 in LA)
 - o Speaker, Region 6 Leadership Institute Meeting (2017 in San Antonio, 2018 in St. Louis)
- Association of Change Management Professionals, Member
- PMO Global Alliance, Member

CURRICULUM VITAE

Michael R. Ford

Clow Faculty 422 Phone: (920)-424-1580 University of Wisconsin Oshkosh E-mail: fordm@uwosh.edu

@fordm10

ACADEMIC APPOINTMENTS

University of Wisconsin Oshkosh 2019 - Present

Associate Professor of Public Administration (with Tenure)

University of Wisconsin Oshkosh 2013 – 2019

Assistant Professor of Public Administration

Helen Bader Institute for Nonprofit Management
Affiliate Faculty
2018 - Present

Classes Taught:

- MPA 711 Intro to Public Administration
- MPA 725 State and Local Government
- MPA 730 Public and Private Nonprofit Partnerships
- MPA 732 Analytic Methods in Public Administration
- MPA 744 Nonprofit Management and Leadership
- MPA 752 Public Budgeting and Financial Management
- MPA 780 Student Capstone
- MPA 792 Special Topics in Public Administration: Privatization
- PA 102 Contemporary Public Issues: Wisconsin's Collective Bargaining Reform
- PA 221 Intro to Public Administration
- PA 307 Administrative Law and Procedure
- PA 336 Government and the Economy

EDUCATION

University of Wisconsin-Milwaukee August 2013

Ph.D. Urban Studies

Dissertation: "The Impact of School Board Governance on Academic

Achievement in Diverse States"

University of Wisconsin-Milwaukee May 2008

M.A. Political Science

Masters Paper: "Graduation Rates and Market Share in the Milwaukee

Public Schools"

Marquette University May 2004

B.A. Political Science

Cum Laude

- **Ford, M.** & Ihrke, D. (Accepted Manuscript). Comparing School Board Governing Dynamics in Small Rural and Suburban Districts. *Public Administration Quarterly*.
- **Ford, M.** & Ihrke, D. (2019). School Board Member Strategic Planning Prioritization and School District Performance. *Leadership and Policy in Schools. DOI: 10.1080/15700763.2019.1638420.*
- **Ford, M.** & Andersson, F. (2019). Sources of Isomorphism in the Milwaukee Voucher School Sector. *Public Policy and Administration. DOI: 10.1177/0952076719838298.*
- **Ford, M.R.** & Ihrke, D. (2018). Perceptions are Reality: A Framework for Understanding Governance. *Administrative Theory & Praxis, DOI:* 10.1080/10841806.2018.1512337.
- **Ford, M.R.** & Ihrke, D. (2018). Third Party Governance Training and Voucher School Performance. *Journal of School Choice*, *11*(3), 382-400.
- **Ford, M.R.** & Ihrke, D. (2018). Determinants of Priority Conflict on City School Boards. *Urban Education*. *DOI:* 10.1177/0042085918770713.
- **Ford, M.R.** & Ihrke, D. (2018). Linking the Distribution of Board-Executive Governance Responsibilities To Charter School Performance. *International Journal of Organizational Analysis*, 26(1), 2-18.
- **Ford, M.R.** & Ihrke, D. (2017). Bridging the Charter School Accountability Divide: Defining a Role for Nonprofit Charter School Boards. *Education and Urban Society. DOI:* 10.1177/0013124517747365.
- **Ford, M.R.** & Andersson, F. (2017). Taking Stock and Moving Forward: Lessons From Two Plus Decades of Research on the Milwaukee Parental Choice Program. *Journal of School Choice*. *DOI:* 10.1080/15582159.2017.1350085.
- **Ford, M.R.** & Andersson, F. (2017). Determinants of Organizational Performance in a Reinventing Government Setting: Evidence from the Milwaukee School Voucher Program. *Public Management Review. DOI: 10.1080/14719037.2017.1296487.*
- **Ford, M.R.** & Ihrke, D. (2017) School Board Member Definitions of Accountability: A Comparison of Charter and Traditional Public School Board Members. *Journal of Educational Administration*, 55(3), 280-296.
- Ihrke, D. & **Ford, M.R.** (2017). Board Development Practices on Public Versus Nonprofit School Boards: Is There a Difference? *Journal of Nonprofit Education and Leadership.* 7(2), 139-150.
- Andersson, F. & **Ford, M.R.** (2017). Entry Barriers and Nonprofit Founding Rates: An Examination of the Milwaukee Voucher School Population. *Nonprofit Policy Forum.* 8(1), 71-90.
- **Ford, M.R.** & Ihrke, D. (2017). Board Conflict and Public Performance on Urban and Non-Urban Boards: Evidence From a National Sample of School Board Members. *Journal of Urban Affairs*, *39*(1), 108-121.
- **Ford, M.R.** & Ihrke, D (2016). Differences in School Board Member Relations with Hired and Elected Superintendents: A First Look. *International Review of Public Administration*, 21(4), 292-304.

- **Ford, M.R.** & Ihrke (2016). The Impact of Wisconsin's Act 10 on Municipal Management in Smaller Municipalities: Views from Local Elected Officials. *Public Policy and Administration*. *DOI:* 10.1177/0952076716683763.
- **Ford, M.R.** (2016) Funding Impermanence: Quantifying the Public Funds Sent to Closed Schools in the Nation's First Urban School Voucher Program. *Public Administration Quarterly*, 40(4), 882-912.
- **Ford, M.R.** & Ihrke, D. (2016). Understanding School Boards and Their Use of Different Models of Governance. *Journal of Public and Nonprofit Affairs*, 2(2), 67-81.
- **Ford, M.R.** & Ihrke, D. (2016) Comparing Nonprofit Charter and Traditional Public School Board Member Perceptions of the Public, Conflict, and Financial Responsibility: Is There a Difference and Does it Matter? *Public Management Review*, 18(7), 972-992.
- **Ford, M,** D. Ihrke (2016). Are we on the same page? Determinants of school board member understanding of group accountability perceptions. *Public Organization Review, DOI:* 10.1007/s11115-016-0350-6.
- **Ford, M.R.** & Andersson, F. (2016). Determinants of Organizational Failure in the Milwaukee School Voucher Program. *Policy Studies Journal, DOI: 10.1111/psj.12164*.
- **Ford, M.R.** (2016). Milwaukee Voucher School Leaders' Views on Accountability: What Are They, and Why do They Matter? *Leadership and Policy in Schools, DOI:* 10.1080/15700763.2016.1181189.
- **Ford, M.R.** D. Ihrke, N. Grasse, & Brian Cherry (2016). Perceptions of Council Member-Department Head Interactions in Local Government. *Journal of Public Affairs*, *DOI:* 10.1002/pa.1597.
- **Ford, M.R.** & Andersson, F. (2016). Organizational Failure in the Hollow State: Lessons from the Milwaukee Voucher Experience. *International Journal of Public Administration, DOI:* 10.1080/01900692.2015.1053613.
- **Ford, M.R.** (2015). Governing for Results on a Post-Collective Bargaining Wisconsin School Board. *Journal of School Choice*, 9(4), 529-550.
- **Ford, M.R.** (2015). Nailing Shut the Policy Window: The Policy Evolution of America's First Urban School Voucher Program. *Journal of Public and Nonprofit Affairs*, 1(2), 97-99.
- **Ford, M.R.** & Ihrke, D. (2015). School Board Member Definitions of Accountability: What are they, and Do they Impact District Outcomes? *Public Performance & Management Review*, 39(1), 198-222.
- **Ford, M.R.** & Ihrke, D. (2015). Determinants of Conflict on Wisconsin School Boards. *Public Policy and Administration*, *DOI:* 10.1177/0952076715610414.
- **Ford, M.R.** (2015). A Faith-Based Advantage? Comparing the Academic and Fundraising Performance of Sectarian and Non-Sectarian Nonprofit Schools In Milwaukee's School Voucher Program. *Nonprofit Management & Leadership*, 26(1), 91-104.

- **Ford, M.R.** & Ihrke, D. (2015). Do School Board Governance Best Practices Improve District Performance? Testing the Key Work of School Boards in Wisconsin. *International Journal of Public Administration*, 39(2), 87-94.
- **Ford, M.R.** & Ihrke, D. (2015). A Comparison of Public and Charter School Board Governance in Three States. *Nonprofit Management & Leadership*, 25(4), 403-416.
- Andersson, F. & **Ford, M.R.** (2015) Social entrepreneurship through an organizational ecology lens: Examining the emergence and evolution of the voucher school population in Milwaukee. *VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations, DOI:* 10.1007/s11266-015-9576-0.
- Andersson, F. & **Ford, M.R.** (2014) Reframing Social Entrepreneurship Impact: Productive, Unproductive and Destructive Outputs and Outcomes of the Milwaukee School Voucher Programme, *Journal of Social Entrepreneurship*, *6*(3), 299-219.
- **Ford, M.R.** (2014). Changes in School Enrollment Patterns After the First-Time Release of School-Level Test Scores in Milwaukee's School Voucher Program A First Look. *Education and Urban Society, DOI:* 0013124514536439.
- **Ford, M.**, & Merrifield, J. (2013). School Choice Legislation: Impact Assessment and Fiscal Notes. *Journal of School Choice*, 7(1), 37-60.
- **Ford, M.** (2011). School Exits in the Milwaukee Parental Choice Program: Evidence of a Marketplace? *Journal of School Choice*, *5*(2), 182-204.

PEER-REVIEWED BOOK

Ford, M. R (2017). The Consequences of Governance Fragmentation: Milwaukee's School Voucher Legacy. *Lexington Books: Lanham, MD*.

BOOK CHAPTERS

- **Ford, M. R.,** & Velez, W. (2017). The Failure of Accountability in the Milwaukee Parental Choice Program. In G. Q. Conchas, M. Gottfried, B. M. Hinga, & L. Oseguera (Eds.), *Educational Policy Goes to School*. New York: Routledge.
- **Ford, M. R.** (2016). No-Bid Contracts. In N.S. Lind, E.T. Rankin, & G. Harris (Eds.), *Today's Economic Issues*. Denver, CO: ABC-CLIO.
- **Ford, M. R.** (2016). Deficits and Balanced Budgets. In N.S. Lind, E.T. Rankin, & G. Harris (Eds.), *Today's Economic Issues*. Denver, CO: ABC-CLIO.

BOOK REVIEWS

- **Ford, M. R.** (2018). Book Review of Can Governments Earn our Trust by Donald F. Kettl, *Journal of Public and Nonprofit Affairs*, (4)2, 244-246.
- **Ford, M. R.** (2013). Book Review of Education Governance for the 21st Century: Overcoming the Structural Barriers to School Reform by Paul Manna and Patrick McGuinn (Eds.), *Journal of School Choice*, (7)4, 603-605.

ENCYLOPEDIA ENTRIES

Ford, M. R. (2017) Organizational Lifecycles. *Global Encyclopedia of Public Administration, Public Policy, and Governance*. Ali Farazmand (ed.).

Ford, M. R. (2017) Population Ecology Theory of Organizations. *Global Encyclopedia of Public Administration, Public Policy, and Governance*. Ali Farazmand (ed.).

OTHER SELECTED PUBLICATIONS_

Is American Public Administration in Decline? PA Times. August, 2018.

Lessons in Performance Measurement from Wisconsin. PA Times. August, 2018.

Challenging the Public Administration Status Quo. PA Times. July, 2018.

The Value Research of Research in Practitioner-Focused MPA Programs. PA Times. April, 2018.

Good Practices are Good for Students. Wisconsin School News. March, 2018.

The Practical Challenge of Doing What Works. PA Times. March, 2018.

Lessons from the Government Shutdown. *PA Times*. February, 2018.

The Big Questions Facing Public Administration in 2018. PA Times. January, 2018.

The Makings of a Good Municipal Budget Document. PA Times. December, 2017.

In Defense of Democratic Governance. *PA Times*. November, 2017.

Recommitting to Public Service Values in Troubled Times. PA Times. October, 2017.

What happened in Milwaukee? The city's school voucher legacy. *Thomas B. Fordham Institute Flypaper Blog*. July 2017.

Making the Most of Undergraduate Public Administration. PA Times. September, 2017.

The Importance of Studying Small Municipalities. *PA Times*. August, 2017.

Yes, school board members are often ideological, and that's OK. *Brookings Institution Brown Center Chalkboard Blog.* January, 2017.

In Milwaukee, school vouchers have helped many private schools to fail. *London School of Economics US Centre Daily Blog on American Politics and Policy*. January, 2017.

What's the Root of School Board Conflict. School Administrator (Monthly Magazine of the School Superintendents Association). January, 2017.

Identifying and Addressing Unproductive Conflict on Wisconsin School Boards. *Wisconsin School News*. June-July, 2016.

The Challenge of Linking Governance to Performance. PA Times. May, 2016.

Governance and Student Achievement. *Wisconsin School News*. December, 2015. Co-Authored with Douglas Ihrke.

The Fiscal Calculator. *The Friedman Foundation for Educational Choice*. September 24, 2015. Co-Authored with John Merrifield: http://www.edchoice.org/research/the-fiscal-calculator/.

An Overview of Milwaukee's K-12 Education System, Section in *Pathway to Success for Milwaukee Schools*, Wisconsin Policy Research Institute, June 2013.

Understanding School Finance in Wisconsin: A Primer. *Wisconsin Policy Research Institute*, May 2013.

The Impact of Disruptive Students in Wisconsin School Districts. *Wisconsin Policy Research Institute*, April 2013.

Using Value-Added Analysis to Raise Student Achievement in Wisconsin. *Wisconsin Policy Research Institute*, June 2012. Co-authored with Sarah Archibald.

MPS' Looming Fiscal Crack-Up. Wisconsin Interest Magazine, July 2012.

A Modern Teacher Compensation System for Wisconsin. Wisconsin Policy Research Institute, January 2012.

How to Deal with State's School Wake-Up Call. *Madison Capital Times*, June 11, 2012. Coauthored with Sarah Archibald.

Education Wake-Up Call is Looming. *Milwaukee Journal Sentinel*, June 5, 2012. Co-authored with Sarah Archibald.

"Milwaukee's Lessons for Madison Prep." Capital Times, Madison, WI, December 16, 2011.

SELECTED RECENT CONFERENCE/SYMPOSIUM PRESENTATIONS

"School Sector Mobility in a Mature School Choice Environment." Annual Conference of the American Society of Public Administration, March 2019.

"Learning from School Choice in Milwaukee." *Center for the Advancement of Opportunity (Funded symposium)*, Washington D.C., September 2018.

"School Administration Reform Adoption in a Post-Collective Bargaining Governance Environment." *Midwest Public Affairs Conference*, Chicago, IL, May 2018. With Douglas Ihrke.

"The Challenge of Nonprofit Accountability in the Urban Hollow State." *Texas Tech University Symposium on Nonprofits (Competitive funded symposium)*, Lubbock, TX. March 2018

"Governance in Small Municipalities: Priorities, Dynamics, and Challenges." *Annual Conference of the America Society for Public Administration*, Denver, CO, March 2018. With Douglas Ihrke. "Third Party Governance Training and Milwaukee Voucher School Performance." *International Conference on School Choice and Reform*, Fort Lauderdale, FL. January 2018. With Douglas Ihrke.

- "Fiscal and Customer Isomorphism in the Milwaukee Voucher School Sector." *Public Administration, Public Policy and Nonprofit Studies Research: Are we All Touching the Same Camel Symposium at George Washington University (Competitive funded symposium).* June, 2017. With Fredrik Andersson.
- "Leveraging Media, Social and Otherwise to Connect Local Government Research to Practice." *Midwest Public Affairs Conference*, Omaha, NE. June 2017.
- "Understanding Perceptions of Council Member Department Head Interactions in Wisconsin Local Government: What Factors Make a Difference?" *Midwest Public Affairs Conference*, Omaha, NE. June 2017. With Douglas Ihrke.
- "Increased Executive Power Over the Administrative Rules Process: Information from a Natural Experiment." *Midwest Public Affairs Conference*, Omaha, NE. June 2017. With Joshua Tegen.
- "Bridging the Charter School Accountability Divide: Defining a Role for Nonprofit Charter School Boards." *75th Annual Midwest Political Science Association Conference*, Chicago, IL. April 2017. With Douglas Ihrke.
- "City Council Member Attitudes Toward Nonprofit Policy Roles and Nonprofit Capacity in Small Wisconsin Communities." 47th Annual Urban Affairs Association Conference, Minneapolis, MN, April 2017. With Douglas Ihrke.
- "Perceptions are Reality: A Framework for Understanding Governance." *Annual Conference of the America Society for Public Administration*, Atlanta, GA, March 2017. With Douglas Ihrke.
- "Understanding Gender Differences in Ranking the Causes of Local Government Conflict: The Case of Small Wisconsin Municipalities." *Midwest Public Affairs Conference*, Columbus, OH. June 2016. With Douglas Ihrke.
- "Entry Barriers and Nonprofit Founding Rates: An Examination of the Milwaukee Voucher School Population." *The 2016 Research Colloquium on Social Entrepreneurship at the Midwest Center for Nonprofit Leadership*, Kansas City, MO. May 2016. With Fredrik Andersson.
- "Determinants of Priority Conflict on City Schools Boards." 74th Annual Midwest Political Science Association Conference, Chicago, IL. April 2016. With Douglas Ihrke
- "The Impact of Wisconsin's Act 10 on Municipal Management in Smaller Municipalities: Views from Local Elected Officials." *Annual Conference of the America Society for Public Administration*. Seattle, WA. March 2016.
- "School Board Member Definitions of Accountability: Applying the Romzek and Dubnick Framework." *Annual Conference of the America Society for Public Administration.* Seattle, WA. March 2016. With Douglas Ihrke.
- "Determinants of School Failure in the Milwaukee Voucher Program." *Annual Conference of the America Society for Public Administration*. Seattle, WA. March 2016. With Fredrik Andersson.

OTHER SELECTED INVITED PRESENTATIONS/MEDIA APPEARANCES

- "Connecting Group Dynamics, Governance and Performance: Evidence from Minnesota Charter School Boards." Invited Speaker at *University of Wisconsin-Madison School of Human Ecology*. November 9, 2018.
- "Lessons Lost." Quoted in Milwaukee Journal Sentinel, October 5, 2018.
- "Accountability and Nonprofit Failure." Guest Lecture at *University of Wisconsin-Milwaukee Program Evaluation and Policy Analysis Course*. April, 2018.
- "The Wisconsin Superintendent: Priorities, Challenges, and Board Relations." Invited Speaker at the *Annual Wisconsin Association of School District Administrators Conference*, Oshkosh, WI, April, 2018.
- "School boards increasingly embrace the ABCs of social activism." Quoted in *Washington Post*, February 17, 2018.
- "Making the Most Out of Your School Board." Invited Speaker at the *Wisconsin State Education Convention*, Milwaukee, WI, January, 2018.
- "Wisconsin Schools Lack Minority Teachers." UpFront with Mike Gousha, WISN Milwaukee, December 3, 2017.
- "The Next Generation of School Choice Research." Funded invited presentation at EdChoice, Indianapolis, IN. December, 2017.
- "Local Government in Wisconsin." Invited Speaker at Leadership Oshkosh Government Day. Oshkosh, WI. November, 2017.
- "Small Houston charter school pays top dollar to leader, owns luxury condo." Quoted in *Houston Chronicle*, November 4, 2017.
- "How a bizarrely complex structure blocks change for Milwaukee students." Book discussed in *Milwaukee Journal Sentinel*, October 27, 2017.
- "Walker And Evers Clash Over Future Of Education." Guest on Wisconsin Public Radio Central Time, September 21, 2017.
- "A quiet change in Indiana law could mean a bigger voucher program and a wild ride for families." Quoted in *Chalkbeat*, April 10, 2017.
- "Few challengers in local primary elections." Quoted in *Appleton Post-Crescent*, February 19, 2017.
- "Scott Walker's boost in aid tied to Act 10; school staff must pay 12% of health care costs." Quoted in *Milwaukee Journal Sentinel*, February 10, 2017.
- "Local Government in Wisconsin." Invited presentation to Leadership Oshkosh. November 16, 2016.
- "The Future of K-12 Education in Wisconsin." Invited presentation to *The Oshkosh League of Women Voters*. November 9, 2016.

Research referenced in the *Washington Post*, August 19, 2016: Trump's Perplexing Comments About Education,

Quoted in the American School Board Journal, April, 2016: The Key to Success.

Quoted in the Oshkosh Northwestern, March 14, 2016: Finance expert: OASD not 'crying wolf' on deficit.

Interviewed on Fox 11 News Green Bay WI, March 1, 2016: Five years under Act 10.

Quoted in the *Wisconsin State Journal*, February 13, 2016: Local officials divided over whether Act 10 is working in their communities.

Guest on Central, Wisconsin Public Radio, Feb. 10, 2016. Topic: Education Expert Proposes Unified Board For All Milwaukee Schools.

Quoted in the *Milwaukee Journal Sentinel*, January 30, 2016: Pie in the sky? Here's an idea for turning schools around.

"From Bold Experiment to Status Quo: The Policy Evolution of America's First Urban School Voucher Program." Invited Presentation to the UW-Oshkosh African-American Studies Program. November, 2015.

"Accountability and the Role of Schools Boards." Invited Presentation at the Wisconsin Association of School Boards Legislative Advocacy Conference. November, 2015.

"The State of Communities under 10,000 & Why It Matters for Everyone: Results from a Recent Survey." Invited Presentation at the 117th Annual Conference of the Wisconsin League of Municipalities. October, 2015.

"Evaluating Financial Condition in the Nonprofit Sector." Invited Guest Lecturer at the University of Wisconsin-Milwaukee, NonProf 958:Topics in Nonprofit Administration: Leadership of Nonprofit Organizations. November, 2015.

"The State of Wisconsin Communities with Under 10,000 Residents." Invited presentation at the League of Wisconsin Municipalities CEOs Conference. August, 2015.

"Charter School Board Member Productivity: Perceptions and Reality." Invited Guest Lecturer at the University of Wisconsin-Milwaukee, Business Management 725, Governances and Executive Leadership in Non-Profit Organizations. February, 2015.

"Milwaukee Voucher School Leaders' Views on Accountability: What Are They, and Why do They Matter?" Presented at the Nonprofit Research Colloquium at the Helen Bader Institute for Non-Profit Management, Milwaukee, WI. February 2015.

"Clintonville Public Library Survey." Presented to the Clintonville, WI Library Board, December 8th 2014.

"Communicating with Elected Officials: Lessons for Community Leaders." Invited presentation at 2014 Leadership Wisconsin Conference, Oshkosh, WI. November 17, 2014.

"Evaluating Financial Condition in a Municipality: Can it Apply to the Nonprofit Sector?" Invited Guest Lecturer at the University of Wisconsin-Milwaukee, NonProf 958:Topics in Nonprofit Administration: Leadership of Nonprofit Organizations. November 10, 2014.

"Miller's Bay Neighborhood Plan: Presentation to the Miller's Bay Neighborhood Association." October 7, 2014.

"Evansville Community Survey: Presentation to the City of Evansville Plan Commission." May 5, 2014, with Karl Nollenberger.

"Board Member Conflict, Attitudes Towards the Public, and Responsibilities: A Comparison of Charter and Traditional Public School Board Members in Minnesota." Invited Guest Lecturer at the University of Wisconsin-Milwaukee, Public Administration 958: Governance and Executive Leadership of Non-Profit Organization. February 17, 2014.

"From Bold Experiment in Privatization to Status Quo: The Policy Evolution of America's first Urban School Voucher Program." Presented as part of the panel, "Life After Vouchers: Expansion, Accountability & Outcomes," at the 7th annual Henry W. Maier State of Milwaukee Summit, November 2013.

"Statewide Voucher and Regional Independent Charters: What Lies Ahead?" Presented at the Wisconsin Association of School Boards Legislative Advocacy Conference, Stevens Point, WI. November 2013.

"Comparing Governance Behaviors on Traditional Public School Boards and Non-Profit Charter School Boards in Three Midwestern States." Presented at the Nonprofit Research Colloquium at the Helen Bader Institute for Non-Profit Management, Milwaukee, WI. October 2013 with Douglas Ihrke.

Guest on Lake Effect, WUWM Milwaukee, April 18, 2013. Topic: The impact of disruptive students on K-12 education.

Panelist at the 2012 Midwest Catholic Education Advocate Conference at Marquette University, July 12, 2012.

"Milwaukee K-12 Education," Presented at the 2012 Alliance for Catholic Education Parental Choice Symposium: Marquette University, June 15, 2012.

"Independent Charter School Per-Pupil Payments: Projections and Policy Options." Presented at the Milwaukee Charter School Advocates Seminar Number One, June 27, 2012.

Appearance on Eau Claire, WI WEAU News, "Could Wisconsin Interstates Become Tollways?" February 13, 2012

"Wisconsin's Economy and the Public Mood," Presented at the Wisconsin Counties Association 2012 Legislative Exchange, February 7, 2012.

Guest on UpFront with Mike Gousha, WISN Milwaukee, January 15, 2012. Topic: Teacher compensation policies.

Panelist at the Illinois Policy Institute Vouchers and the Future of Education in Illinois discussion in Chicago, IL: Feb. 5, 2010.

Guest on WGN Radio's Milt Rosenberg show: September 21, 2009. Topic: Education reform.

Guest on Wisconsin Public Radio's Conversations with Kathleen Dunn: February 28, 2008. Topic: Milwaukee education research.

SERVICE/AWARDS AND CONTRACTS

SERVICE/AWARDS AND CONTRACTS	
Service to the University	
Faculty Advisor to the UW-Oshkosh Student Lacrosse club.	Sept. 2015 - Present
Faculty Advisor to the UW-Oshkosh Graduate Student Association.	Aug. 2015 - Present
Member of the University of Wisconsin -Oshkosh IRB Committee.	Feb. 2014 - Present
Service to the Department	
Advisor to the Public Administration Minor.	Fall 2013 - Present
Chair of Public Administration Department Faculty Search Committee.	2016-2017
Chair of Public Administration Department Assessment Committee.	Fall 2013 – 2015
Service to the Profession	
President of the Midwest Public Affairs Conference	2018 - Present
Conference Coordinator, 5th annual Midwest Public Affairs Conference	2018
Chair of the Awards Committee, 4th annual Midwest Public Affairs Conferen	ce. 2017
Discussant, 4th annual Midwest Public Affairs Conference	2017
Discussant, 3 rd annual Midwest Public Affairs Conference.	2016
Chair of the Awards Committee, 3 rd annual Midwest Public Affairs Conferen	ace 2016
Discussant, Annual Conference of the American Society for Public Administr	cation 2016, 2017
Member of the Midwest Public Affairs Conference Advisory Board.	2015 - 2018
Discussant, 72 nd Midwest Political Science Association Conference.	2014
Peer reviewer for: State and Local Government Review, the American Revie of Public Administration, Administration and Society, Journal of Public and Nonprofit Affairs, Public Budgeting, Accounting & Financial Management, Nonprofit & Volunteer Sector Quarterly, Education Policy Analysis Archive Public Policy and Administration, International Journal of Organizational Analysis, Public Administration Review, Journal of Nonprofit Education and Leadership, Public Performance and Management Review, Journal of Public Administration and Theory, Urban Education, Journal of School Choice, Society & Administration, Public Management Review, and Review of Public Personnel Administration.	s, I vial
Service to the Community	
Member of the City of Oshkosh Long Range Financial Planning Committee	2019 - Present

2018 - Present

President of the Miller's Bay Neighborhood Association

Member of the Oshkosh, WI United Way Fiscal Health Committee	2018
Member of the City of Oshkosh Plan Commission.	2017- Present
Vice President of the Miller's Bay Neighborhood Association.	2016 - 2018
Member of the Oshkosh, WI United Way Women in Poverty Committee.	2016 - Present
Chair of the Miller's Bay Neighborhood Planning Committee, Oshkosh, V	WI. 2015
Awards and Contracts	
UW Oshkosh College of Letters and Sciences Community Engagement A	ward. 2018
UW Oshkosh Faculty development grant: Connecting School Board Gove to Performance, for \$5,000.	ernance 2017
Collaborator on Social Sciences and Humanities Research Council Insigh Development Grant: <i>Canadian School Board Governance and School Dis Performance</i> , for \$61,790 (Canadian). With Nathan Grasse, Carleton University, Jack Lucas, University of Calgary, and Douglas Ihrke, University Wisconsin-Milwaukee.	strict
PAVE Milwaukee: Governance Training Evaluation, \$1,500.	2016-2018
EdChoice: The Fiscal Calculator Project, \$5,000.	2016-2017
American Society for Public Administration Founders' Fellow.	2016
Thomas B. Fordham Institute Emerging Education Policy Scholar.	2016
Awarded contract to conduct the 2014 Clintonville, WI library satisfaction survey. 2014	
Awarded contract to conduct the 2014 City of Evansville, WI community needs survey. 2013 With Karl Nollenberger.	
University of Wisconsin-Milwaukee Urban Studies Dissertation Grant. 2012	
University of Wisconsin-Milwaukee Urban Studies Graduate Teaching Fellow. 2011-2012	
PROFESSIONAL EXPERIENCE	
Wisconsin Policy Research Institute Director of Research Hartland, WI	otember 2011 - July 2013
School Choice Wisconsin Vice-President of Operations Milwaukee, WI	e 2008 - September 2011
School Choice Wisconsin Research Associate Milwaukee, WI	tember 2004 - June 2008

Jason Fields for Wisconsin 11th Assembly District Campaign Manager/Consultant Milwaukee, WI

Fall 2006, Fall 2008

PROFESSIONAL MEMBERSHIPS

American Society for Public Administration
Association for Research on Nonprofit Organizations and Voluntary Action
Public Management Research Association
ICMA

Sara Hodges

917.370.5323 • sara.hodges@gmail.com

EdBuild February 2015 – Present

Director of Data & Visualization

www.edbuild.org

Managing a team of data analysts and web developers

 Oversee all data and visualization products for a nonprofit that uses maps and data analysis to redefine education finance problems and solutions

 Develop data-driven stories and visuals that have been covered by over 100 news outlets including The Washington Post, Vox, The Atlantic, New York Times Magazine and NPR, submitted in at least two federal court cases, and cited in numerous academic papers

- Story identification, data analysis, research, writing, web development, maps, graphics, and project management in a deadline-driven environment
- Train team in geography, data-driven analysis of public policies, and web map development

Sara Hodges LLC - Environmental research and mapping consultancy

July 2012 - 2017

Web Map Developer

New York Hall of Science | Carnegie Museum of Natural History

Created interactive map platform on local impacts of climate change in two cities

• Research, data collection and writing to explain impacts on local infrastructure

• Full stack development of website and maps

Environmental & Geospatial Expert

www.cuspmap.org

United Nations Environment Programme in Afghanistan August 2013 – 2015 Managed Afghanistan Environmental Data Centre and UNEP data team

• Established a collaborative environmental data platform that collected data from NGOs and international government agencies and trained Afghan data scientists to use the data to inform policy and decision-making

EverPower Wind Holdings

May 2008 – June 2012

GIS Manager

Environmental analysis for the design and construction of commercial-scale wind farms

Blue Bass Vintage Clothing

September 2006 – August 2009

Co-owner

Owned and operated vintage and handmade clothing store

Urban Heat Island Group

September 2004 – May 2006

Statistician

Statistical analysis to assess green infrastructure strategies to reduce electricity use

CUNY-Hunter College

September 2003 – September 2004

Researcher

Spatial analysis for DEP project on the resiliency of wastewater infrastructure

New York City Environmental Justice Alliance

September 2001 – September 2003

GIS Analyst

Analyzed the distribution of and access to open space in New York City

Technical Skills

Research

• Lexis Advance, FOIA, US Census, persistence

Mapping/ Data Analysis

• R, ArcGIS, QGIS

Design/Data Visualization

• R, Adobe Illustrator, JavaScript, HTML, d3.js, MapBox, Carto

Education

M.A. in Geography

2001 - 2004

Hunter College – City University of New York

B.A. in Mathematics, Minor in Fine Arts

1994 - 1998

Colorado College

Publications

- \$23 Billion
- Fractured The Accelerating Breakdown of America's School Districts
- Stranded How States Maroon Districts in Financial Distress
- Fault Lines America's Most Segregating School District Borders
- Dividing Lines Gated School Districts
- Power In Numbers
- Lotteries As School Funding The Game Is Rigged
- CUSP Map
- Mitigating New York City's Heat Island: Integrating Stakeholder Perspectives and Scientific Evaluation - Sept 2009 Bulletin of the American Meteorological Society.

Awards

- PIE Network, Most Actionable Research, 2018
- The Atlantic, most important education visualizations 2015 and 2017
- George N Shuster Award for most outstanding Master's thesis
- Society of Women Geographers Fellowship
- CUNY Graduate Center Science Fellow

Interests

Biking, Exploring, Dioramas, Infrastructure, Public Policy, Food

Matthew Richmond (919) 951-9871

richmond.mjr@gmail.com

240 E 24th St., Apt 2E New York, NY 10010

EDUCATION

University of North Carolina at Chapel Hill

BA with Honors, Political Science and Economics

University of Pittsburgh – Graduate School of Public and International Affairs (GSPIA)

MID - Development Planning and Environmental Sustainability

WORK/RELATED EXPERIENCE

Chief Program Officer

Nov 2016-Present

EdBuild (Jersey City, NJ)

- Manages all program-related activity, including national-level research related to education finance and resource equity.
- Involved at all levels of state-level consulting. Includes the analysis of state education funding formulas, the evaluation of effective/efficient/equitable targeting of state and local dollars, identification of potential improvements, and presentation to stakeholders.

Consultant Aug 2015–June 2016

Malawian Office of the President and Cabinet (Lilongwe, Malawi)

- Consulted on issues related to civil service reform, anti-corruption, and accountability systems.
- Included legislation edits and country-wide trainings on new methodology.

Director of Policy

Nov 2014–July 2015

EdBuild (Jersey City, NJ)

- Developed and wrote on policy priorities on topics related to state financial formulas, political boundaries, and equity in education dollars.
- Managed the development of a financial simulator for school districts.

Research Analyst

June 2012-Aug 2014

Thomas B. Fordham Institute (Washington, D.C.)

• Research focused on education-policy issues, including school staffing, special-education funding and policy, policy framing, and poverty.

Focus Group Facilitator/Analyst

Summer of 2012

AIDS Coalition of Southwestern Pennsylvania (Pittsburgh, PA)

• Developed interview protocols and facilitated focus groups of HIV+ beneficiaries.

Volunteer Summer of 2011

Lisha Mtoto Initiative, School and Food Program (Nairobi, Kenya)

• Designed contract and framework of a micro-finance program for business owners.

Counselor Summers 2007, 2008

Autism Society of North Carolina (ASNC) (Asheville, NC)

AUTHORED RESEARCH

International Affairs.

Johnson Center's Leadership Portfolio Program

Selective leadership program at the Graduate School for Public &

School-Level Spending in the D.C. Metro Area October 2014 Analyzed patterns within per-pupil expenditures, reporting based on income, district, school type, and other variables. The Hidden Half: School Employees Who Don't Teach August 2014 Describes growth of non-teaching staff since 1950 at the national, state, and district level. Financing the Education of High-Need Students November 2013 • Offers district- and state-level policy recommendations geared toward improving the funding of services for students with exceptional needs. RECOGNITION/AWARDS Aug 2015–June 2016 **Fulbright Public Policy Fellowship** A fellowship within the U.S. State Department's Fulbright Scholars program, includes a consultancy position and research done within a foreign ministry.

Jan 2011-April 2012