

Spring 5-1-2015

## **An Analysis of the Impact of the Education Special Purpose Local Option Sales Tax (E-SPLOST) on Capital Outlay Expenditures in Georgia School Districts**

Robert Bradley Benson  
*University of Southern Mississippi*

Follow this and additional works at: <https://aquila.usm.edu/dissertations>



Part of the [Education Commons](#)

---

### **Recommended Citation**

Benson, Robert Bradley, "An Analysis of the Impact of the Education Special Purpose Local Option Sales Tax (E-SPLOST) on Capital Outlay Expenditures in Georgia School Districts" (2015). *Dissertations*. 58.  
<https://aquila.usm.edu/dissertations/58>

This Dissertation is brought to you for free and open access by The Aquila Digital Community. It has been accepted for inclusion in Dissertations by an authorized administrator of The Aquila Digital Community. For more information, please contact [Joshua.Cromwell@usm.edu](mailto:Joshua.Cromwell@usm.edu).

The University of Southern Mississippi

AN ANALYSIS OF THE IMPACT OF THE EDUCATION SPECIAL PURPOSE  
LOCAL OPTION SALES TAX (E-SPLOST) ON CAPITAL OUTLAY  
EXPENDITURES IN GEORGIA SCHOOL DISTRICTS

by

Robert Bradley Benson

Abstract of a Dissertation  
Submitted to the Graduate School  
of The University of Southern Mississippi  
in Partial Fulfillment of the Requirements  
for the Degree of Doctor of Philosophy

May 2015

## ABSTRACT

### AN ANALYSIS OF THE IMPACT OF THE EDUCATION SPECIAL PURPOSE LOCAL OPTION SALES TAX (E-SPLOST) ON CAPITAL OUTLAY EXPENDITURES IN GEORGIA SCHOOL DISTRICTS

by Robert Bradley Benson

May 2015

In 1996, legislators approved an amendment to the Georgia Constitution which granted local Boards of Education the authority to seek voter approval for a 1% Education Special Purpose Local Option Sales Tax (E-SPLOST). Revenues from E-SPLOST were to be used exclusively for capital expenses or to retire debt incurred as a result of capital expenses. This study examined eight years of per pupil expenditure data to determine the impact of the E-SPLOST.

The data indicated that differences in per pupil expenditures for instructional equipment were significant, revealing a reduction post E-SPLOST. Further, expenditures for new construction and improvements to existing educational facilities or to acquire new land became more equitable following the inception of the E-SPLOST. Expenditures for instructional equipment, however, became less equitable. Little to no correlation was discerned between increases in expenditures for capital outlay projects and student achievement. Perspectives about how the E-SPLOST could better meet capital outlay needs were gathered from superintendents and school board members. These data disclosed three themes: increased commerce and consumer spending, community understanding of the E-SPLOST, and possible sources of disparity.

COPYRIGHT BY  
ROBERT BRADLEY BENSON  
2015

The University of Southern Mississippi

AN ANALYSIS OF THE IMPACT OF THE EDUCATION SPECIAL PURPOSE  
LOCAL OPTION SALES TAX (E-SPLOST) ON CAPITAL OUTLAY  
EXPENDITURES IN GEORGIA SCHOOL DISTRICTS

by

Robert Bradley Benson

A Dissertation  
Submitted to the Graduate School  
of The University of Southern Mississippi  
in Partial Fulfillment of the Requirements  
for the Degree of Doctor of Philosophy

Approved:

---

Dr. Michael E. Ward, Committee Chair  
Adjunct Professor, Educational Leadership and School Counseling

---

Dr. Tammy F. Greer, Committee Member  
Associate Professor, Psychology

---

Dr. Myron B. Labat, Committee Member  
Assistant Professor, Educational Leadership and School Counseling

---

Dr. Thelma J. Roberson, Committee Member  
Associate Professor, Educational Leadership and School Counseling

---

Dr. Karen S. Coats  
Dean of the Graduate School

May 2015

## DEDICATION

This body of work is dedicated to my family. To my parents, Brad and Anne Benson, I can never thank you enough for your love, guidance, and encouragement throughout my life and with this endeavor. To Shelley and Sam, thank you for your support and sacrifice, I love you both very much and could never have made it without your understanding. Yes, Sam, dad finally finished his dissertation!

## ACKNOWLEDGMENTS

Thank you Dr. Michael Ward. As my dissertation chair you have generously supported and encouraged me to finish. I would never have completed this study without your understanding and leadership. I appreciate you more than you will ever know.

To Dr. Tammy Greer - thank you for always being there to help me on-line, on-phone and on-your-time after a long day of training in Washington, D.C! I have learned so much from you. What a blessing to have had you as my statistician.

To my other committee members, Dr. Myron Labat and Dr. Thelma Roberson, thank you for being there when I needed you.

I must also acknowledge all of the wonderful professors who were willing to travel from Mississippi to Cobb County, GA, during our cohort's class time. In particular, thank you to Dr. Wanda Maulding, whose leadership made this opportunity possible and Dr. Edward Leonard, whose early guidance led to the conceptualization of my topic.

Lastly, thank you to my cousin, Emily Owens, for the last minute help with formatting. You are the best!

TABLE OF CONTENTS

ABSTRACT ..... ii

DEDICATION ..... iii

ACKNOWLEDGMENTS ..... iv

LIST OF TABLES ..... v

CHAPTER

I. INTRODUCTION ..... 1

    Statement of the Problem

    Background

    Research Questions

    Delimitations

    Assumptions

    Definition of Terms

    Justification

    Summary

II. REVIEW OF RELATED LITERATURE ..... 17

    Theoretical Framework

    Litigation and Education Funding

    Education Funding in Georgia

    The School Facility and School Outcomes

    Summary

III. METHODOLOGY ..... 46

    Research Questions and Hypotheses

    Participants in the Study

    Research Design and Procedures

    Analysis of the Results

    Summary

IV. RESULTS ..... 64

    Description of Participants

    Results

    Summary

V.	DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS.....	81
	Summary of Procedures	
	Major Findings	
	Discussion	
	Limitations	
	Recommendations for Policy and Practice	
	Recommendations for Future Research	
	Summary	
	APPENDIXES .....	96
	REFERENCES .....	115

## LIST OF TABLES

### Table

1.	Chronbach's Alpha for Pilot Study and Full Study .....	56
2.	Descriptive Statistics for Capital Outlay Expenditures and SAT Scores .....	66
3.	Survey Descriptive Statistics .....	67
4.	Overall Differences in Per Pupil Capital Outlay Expenditures .....	69
5.	Horizontal Equity of Per Pupil Capital Outlay Expenditures .....	70
6.	Geographic Differences in Per Pupil Capital Outlay Expenditures.....	71
7.	Per Pupil Property Wealth Differences in Capital Outlay Expenditures .....	72
8.	Correlations of Post E-SPLOST Expenditures with Math SAT scores .....	73
9.	Perceptions of School Board Members and Superintendents .....	74
10.	Math SAT Achievement and Use of E-SPLOST.....	75
11.	Superintendent and Board Member Perceptions, Capacity of the E-SPLOST.....	76

## CHAPTER I

### INTRODUCTION

The purpose of this chapter is to introduce the nature and importance of the study. Relevant background information is provided to contextualize and focus the statement of the problem. Next, distinct sections are used to state the research questions, address delimitations and assumptions, and frame the justification and relevance of the study. Key terms within the study are defined to ensure clarity for the reader.

The *Georgia Constitution*, art. VIII, § 1, para.1 asserts that “the provision of an adequate public education for the citizens shall be a primary obligation of the State of Georgia” (p. 59). This statutory obligation is imperative if Georgia is to realize future prosperity through its citizenry. Quality teachers, rigorous learning opportunities, and appropriate instructional resources are key tenets of schooling; however, providing for the education of Georgia’s children requires an adequate and appropriately equipped school building. This sentiment is supported in Georgia school law as described in LexisNexis (2010):

It is declared to be the policy of the State of Georgia to assure that every public school student shall be housed in a facility which is structurally sound and well maintained and has adequate space and equipment to meet each student’s instructional needs as those needs are defined and required by this article.

(p. 147)

Constructing and renovating aging school buildings is a costly endeavor. The financial reality associated with providing facilities for schooling can prove overwhelming, particularly in the face of burgeoning student enrollment and economic

austerity. Local school districts in Georgia fulfill the lion's share of construction and renovation expenses, although the state does provide partial reimbursement to help offset a fraction of costs. In 1996, legislators approved an amendment to the *Georgia Constitution* (art. VIII, § 6, para.4) which granted local Boards of Education the authority to seek voter approval for a 1% Education Special Purpose Local Option Sales Tax (E-SPLOST). The proceeds of the E-SPLOST tax must be used either to fund pre-determined and advertised capital outlay needs of the district, or to retire prior indebtedness incurred as a result of capital outlay expenditures. Subsequent to the E-SPLOST amendment, all but two of Georgia's 180 school districts utilized the tax as a source of capital outlay funding (L. Haase, personal communication, March 2, 2010).

The purpose of this study was: (a) to determine if, for school districts that have utilized the E-SPLOST, capital outlay expenditures have increased significantly by comparing average adjusted per pupil expenditures from 1994-1997 to the same figure for 2005-2008, (b) to determine if the E-SPLOST significantly impacted the equity of expenditures for capital outlay, specifically expenditures associated with new construction, improvements to existing facilities and/or the acquisition of new land, and capital equipment related to technology across all of Georgia's school districts that have participated in the E-SPLOST program, (c) to determine if capital outlay expenditures vary significantly when school districts are grouped according to geographic location within the state and by socioeconomic characteristic, (d) to determine if increased spending for capital outlay needs correlates positively with average student performance on the mathematics section of the Scholastic Aptitude Test, and (e) to determine through

survey data how district superintendents, school board members and state-level legislators view the capacity of the E-SPLOST to provide for their districts' needs.

Chapter I conveys an overarching introduction to the study. The statement of the research problem was used to scaffold the purpose of the study. Pertinent background information has been included to transpose the problem into more specific research questions. Next, delimitations, assumptions, and the definitions of key terms are addressed prior to the justification for the study and chapter summary. Chapter II begins by exploring the theoretical underpinnings of the study as well as a review of literature associated with independent and dependent variables. Chapter III outlines the methodology, identifies the chronological scope and population, and defines the procedures and statistical tests necessary to conduct the investigation. Chapter IV presents the results and explains the data analysis conducted subsequent to the statistical tests. Chapter V conveys the findings of the analysis, conclusions based on the findings, and a translation of findings in terms of statutory or regulatory implications and the need for additional research.

### Statement of the Problem

In fall of 2004, the Georgia Department of Education deployed new curricular standards for all of Georgia's schools. The new standards prompt more rigorous learning expectations so that student achievement accountability measures, such as those associated with the federal No Child Left Behind Act (NCLB), could be realized. Logically, raising the standards for student learning should compel a corresponding increase in the standard for meeting adequacy as prescribed by the state constitution. As

an advocate for adequacy in public schools, Peter Schrag (2003) represents this relationship as follows:

There's incontrovertible logic, ethical, fiscal and legal, in the tight two-way link between standards and adequate resources. If a state demands that schools and students be accountable – for meeting state standards, for passing exit exams and other tests – the state must be held equally accountable for providing the wherewithal to enable them to do it. (p. 6)

In 1996, Georgia lawmakers took legislative action to provide its public school districts the wherewithal to provide adequate educational facilities by making a locally imposed E-SPLOST constitutional. This tax provides local school districts a potentially lucrative avenue for securing capital outlay funding. As a consumption tax by nature, the amount of funding an E-SPLOST can generate is predicated by the local spending within the geographic boundaries of the sponsoring school district. It is important to determine, however, whether an E-SPLOST serves all districts equitably as far as meeting the aforementioned statutory assurances the state has made to its public school students. The facilities provided to support the education of a Georgia student should be, at minimum, adequate to facilitate expected student achievement, no matter where the student resides.

Lastly, this study is intended to assist local school boards in determining whether future E-SPLOST referenda will more adequately satisfy their future facility needs. To help in this respect, this study examined how equitably the E-SPLOST has impacted capital outlay expenditures statewide, and whether other variables such as the geographic location of the school district or assessed property wealth per student help explain variances in capital outlay expenditures before and after the inception of the E-SPLOST.

To detect any possible relationships between capital outlay expenditures and student performance, expenditures and test scores from the mathematics section of the Scholastic Aptitude Test were analyzed. The study also used survey data from district superintendents and board of education members to determine if beliefs about the usefulness of the E-SPLOST are consistent across the state, regardless of a district's location or its associated assessed property wealth per student.

### Background

In 1995, the United States Senate requested that the United States General Accounting Office (GAO) conducted a study to determine the condition of schools in the United States. As a result of their study, the U.S. GAO (1996) found that a third of the nation's schools needed extensive repair or replacement and estimated that 14 million students attend schools in need of extensive repair or replacement. A follow up GAO study (2000) sought to determine how states and local districts dealt with the challenges associated with providing public school facilities. The results for Georgia indicated a 41% increase in construction expenditures from 1990 to 1997; comparatively, the average state increase for southern region states was only 26.9% (U. S. General Accounting Office, 2000).

On the heels of the initial GAO report released in 1996, Georgia's lawmakers amended the Georgia Constitution so that local boards of education could seek, through a public referendum, a 1% E-SPLOST in order to generate funding for capital outlay needs. According to Sielke (2001), the amount of state-provided funding for school infrastructure in Georgia increased from \$15.6 million in the 1994 fiscal year, to almost \$190.3 million in fiscal year 1999. Such an increase suggests that school infrastructure

needs became a greater priority to state-level officials and that the availability of the E-SPLOST funding beginning in 1997 had a dramatic impact on the financial capacity of local districts to expediently address the capital needs of their district.

Silva (1999) in his review of California Proposition 13 legislation, usefully frames the sometimes contentious relationship between state legislatures and local government by questioning how much control over financing of local services is vested in communities and how much is vested in the State. Because school facilities in Georgia are largely financed through local tax dollars, dynamic tension is created between the intentions of the state to direct resources in a manner that supports its constitutional charge and the varied desires of local counties with regard to the school facilities they build and maintain.

A provision for public schooling is included in the constitution of every state in the union (Alexander & Alexander, 2005). As a result, public education is legally protected as a constitutional right for individuals and a statutory obligation for state government. In Georgia, funding used to support public education is derived from federal, state, and local sources of taxation. Federal tax dollars are afforded to each state and subsequently each district through yearly grants associated with entitlement grants associated with the No Child Left Behind Act of 2001. Such funding must be used for specific purposes in support of specific students who qualify (No Child Left Behind Act, 2001). Such qualifications and stipulations negate federal money as a reliable source of funding to help budget ongoing expenses associated with capital outlay. Consequently, capital outlay costs are left to each school district to be covered by local and state financial effort.

This is not realistic, however, since the ability to raise revenue through locally imposed taxes varies across Georgia's counties and cities. According to their respective 2008 net property and utility tax digests, Chattahoochee County ranked last with a digest of 60,800,000 dollars; top-ranked Fulton County, on the other hand, had a digest totaling 54,856,212,000 dollars (Georgia Department of Revenue, 2012b). Because of this variance, the state government, in order to fulfill its fiduciary duty, is compelled take steps to address funding inequalities so that educational services and facilities in every locality satisfy the education provision of the State's constitution.

To reconcile funding inequalities, Georgia provides equalization grants to eligible localities as part of a system to redistribute property wealth throughout the State. The specifics of Georgia's redistribution scheme are addressed later. Theoretically, however, Georgia's method for lessening inter-district wealth disparities is grounded in egalitarian thought. Arneson (2000) posits that egalitarianism is a belief that "inequalities in life prospects that simply fall on people and are arbitrary from the moral point of view are problematic and demand justification" (p. 328). In the context of this study, it is arguable that the vast majority of Georgia's students arbitrarily inherit the public school facility provided them. This is because, by and large, public school students attend the school to which they are assigned based on their residence. The redistribution of financial resources by the state of Georgia seems a good-faith attempt to remedy local wealth disparities that are not of the students' creation. When viewed holistically, the increase in statewide spending is impressive, however a closer district by district examination is warranted to determine the proportional and equitable impact E-SPLOST legislation has had across all of Georgia's school districts.

## Research Questions

By design, the study sought to quantify in terms of equity the impact of the E-SPLOST across all districts that have utilized this source of revenue. Specifically, the study pursued the following questions with regard to school construction and renovation expenditures prior to and after the inception of the E-SPLOST:

1. Have average adjusted yearly expenditures for capital outlay increased significantly since the inception of the E-SPLOST?
2. Since the inception of the E-SPLOST, have mean adjusted expenditures for capital outlay become more or less equitable between school districts that participated in the E-SPLOST?
3. Have changes in expenditures for capital outlay varied significantly by the geographical location of the school district?
4. Have changes in expenditures for capital outlay varied significantly by the per pupil property wealth?
5. Is change in expenditures for capital outlay improvement projects since the inception of the E-SPLOST, related to change in student achievement, as operationalized through changes in SAT mathematics scores?
6. Are perceptions of district superintendents, board of education members and state legislators concerning the capacity of the E-SPLOST to provide adequate educational facilities, related to geographic location or role?
7. Is student achievement related to the purposes to which capital expenditures have been applied?

8. What are the perspectives of superintendents, school board members, and state legislators regarding the conditions that will increase the E-SPLOST's capacity to address the capital outlay needs of school districts?

#### Delimitations

Because the primary pursuit of this study was to understand the magnitude and equity of variation in capital outlay expenditures attributable to the inception of the E-SPLOST, participants for this study were limited to the 178 Georgia school districts whose communities have chosen, by referendum approval, to impose the E-SPLOST to secure funding for capital outlay needs. This may have limited the degree to which findings might be generalized to other districts and other states. The availability of the E-SPLOST was made constitutional in 1996. Capital outlay expenditures can vary considerably from year to year. To account for this variability, multiple years of expenditure data prior to and after the enactment of the E-SPLOST are included. Because of this, the study utilized capital outlay expenditure data for fiscal years 1994 through 1997 – the four years prior to the E-SPLOST, and fiscal years 2005 through 2008 – the four most recent fiscal years for which expenditure data was available. Thus, eight years of expenditure data was selected for inclusion in the study.

Voter approved imposition of an E-SPLOST is limited to no more than five years for each referendum. Once the advertised time length of the referendum has expired, districts may present a renewed E-SPLOST proposal. District to district participation, in terms of consecutive years, may vary.

The mathematics portion of the Scholastic Aptitude Test was chosen as the student achievement variable because it is the only uniform source of achievement data

available across the school-years included in the study. Other sources of student achievement data such as state tests were considered; however, state initiated alterations in curricula made these sources of data too dissimilar within the timeframe of the study. Lastly, survey participants were limited to current district-level superintendents and board of education members who are directly responsible for E-SPLOST proceeds and expenditures for their respective districts. State-level legislators were initially included however only three responses were obtained despite three invitations to respond. Consequently, state-level legislators were dropped from the analyses. Inclusion of persons fulfilling the two roles as survey participants still confines the opinion data to local-level leaders who have heightened knowledge and experience administering the E-SPLOST as a source of capital outlay revenue.

#### Assumptions

The researcher utilized archival data provided by The Georgia Department of Education, The National Center for Educational Statistics, and the United States Census Bureau. It was assumed that these data were reported and recorded accurately. In addition, it was assumed that the survey respondents provided truthful and accurate representations of their opinions in response to survey questions. In some cases, participants in the survey may have based their responses on previous and current knowledge and beliefs. It was assumed that the recollections of respondents were provided without fear of reprisal. All expenditure amounts were adjusted to 2008 value (the most recent fiscal year included in the study) using the Federal Consumer Price Index for the purpose of analysis. It was assumed that adjusting the dollar amounts in such a manner alleviated, to an acceptable level, any confounding impact on the analysis.

## Definition of Terms

*Adequacy* – the provision of educational resources that are sufficient to provide all students the opportunity to reach, at a minimum, a state-standard level of proficiency (Springer, Liu, & Guthrie 2009)

*Board of Education* – a county or independent board of education exercising control and management of a local school system pursuant to Article VIII, Section V, Paragraph II of the Georgia Constitution (Georgia Department of Education, 2011).

*Capital Outlay* – expenditures which result in the acquisition of fixed assets, existing buildings, improvements to sites, construction of buildings, construction of additions to buildings, retrofitting of existing buildings for energy conservation, and initial and additional equipment and furnishings for educational facilities (LexisNexis, 2010).

*Dillon Rule* – a doctrine espousing that any powers exercised by local governments must be derived from state sovereignty. Local government is subordinate to state government (Gere, 1982).

*Education Special Purpose Local Option Sales Tax (E-SPLOST)* – a Georgia Constitutional provision that allows local boards of education the option of calling for a referendum to ask their voters to approve a special purpose local option sales tax. The tax may be used: (a) for specific capital improvement projects for educational purposes, (b) to retire general obligation debt previously incurred only as a result of capital outlay projects, (c) to issue new general obligation bonds for specific capital outlay projects to be paid with E-SPLOST proceeds (Georgia Department of Education, 2011).

*Egalitarianism* – a social doctrine that asserts it is unjust and unfair for some members of society to be worse off than others through no fault or choice of their own (Arneson, 2008).

*Equity (achievement)* – a status in which each student makes appropriate academic growth each year (Rivers & Sanders, 2002).

*Equity (capital funding)* – a status in which all students have access to educational resources regardless of residence or variations in local wealth (Thompson, Stewart, & Camp, 1989).

*Fiscal Equalization* – financial assistance provided by the state to a local school district in order to equalize the fiscal situation of the local school district. In general, aid from the state increases as the per pupil property wealth of the local district decreases (Odden & Picus, 2008).

*Georgia Performance Standards* - a curriculum for public schools in Georgia that specifies what students are expected to know in each subject and grade (Georgia Department of Education, 2011).

*Home Rule* – the transfer of certain powers from the state to local municipalities thereby affording local municipalities broader powers to enact ordinances and alter certain aspects of local government structure (Bond, 2011).

*McLoone Index* – a ratio of the sum of values from all observations below the 50<sup>th</sup> percentile to the sum of the number of total observations multiplied by the median value (Odden & Picus, 2008).

*Mil* – a tax levied on property expressed as a percentage of assessed value amounting to .001 of a dollar or one-tenth of a cent (Alexander & Salmon, 1995).

*No Child Left Behind Act (NCLB)* – an Act adopted by the United States Congress in 2002 aimed at closing the achievement gap in publicly funded schools through accountability, flexibility, and choice (No Child Left Behind Act, 2002).

*Operating Budget* - a document that expresses the anticipated revenues and planned expenditures of an LUA for a fiscal year (Georgia Department of Education, 2011).

*Per Pupil Property Wealth* – the total taxable property value of the school district divided by the total number of students in the district (Rubenstein & Sjoquist, 2003).

*Property Tax* – a tax levied upon real or personal property located in the county where the owner maintains a permanent legal residence (Georgia Department of Revenue, 2012a).

*Quality Basic Education Act (QBE)* – a legislative Act adopted by Georgia in 1985 that identifies the components of the public education programs deemed essential for an adequate education and defines, by formula, a cost per student for 19 educational programs based on the needs of the students in each program (Georgia School Funding Association, 2009).

*Scholastic Aptitude Test (SAT)* - a standardized assessment of the critical reading, mathematical reasoning, and writing skills of students often used as a common and objective scale for evaluating a student's college readiness (College Board, 2011).

*School Construction Bonds* – a voter-approved loan used by school districts to pay costs of construction. In Georgia, the loan amount may not exceed 10% of the district's assessed valuation (Odden & Picus, 2008).

*Sinking Fund* – a sum of money set apart periodically from the income of a government which is allowed to accumulate for the eventual pay-off of a debt (Columbia Electronic Encyclopedia, 2011).

*Social Justice* - the morally proper distribution of social benefits and burdens among society's members (Young, 1990).

*2008 Value* – a dollar amount equated to 2008 value using the Federal Consumer Price Index calculator.

*Verstegen Index* – the ratio of the sum of the values of all observations above the median to the sum of those observations if they were all at the median (Odden & Picus, 2008).

#### Justification

The results of this study bring about a better understanding of capital outlay funding equity in Georgia and are of use to local boards of education in Georgia as they contemplate how to effectively finance and construct future school facilities. In addition, correlating the Scholastic Aptitude Test results of students with capital outlay expenditures adds to the research base and scholarly debate regarding the impact of the school facility on student achievement. Lastly, Georgia's policymakers and legislators may find the results beneficial in determining legislative actions that may be necessary to support all districts in Georgia in meeting their capital outlay needs and more generally, the educational needs of students.

Similar studies have been completed in Texas (Luke, 2007), Oklahoma (Haxton, 2009), Missouri (Brown, Cook, Mayo & Redus, 2007) and Florida (Harrison, 2005). While each of the aforementioned studies examines unique legislative and legal aspects

associated with its respective state, all aim to better inform current and proposed methods for funding and provide equitable and adequate educational facilities. The prevalence of prior research findings and legal debate surrounding this topic lends legitimacy to the completion of this study.

### Summary

Generating the financial means to provide educational facilities is a daunting prospect for school districts. National surveys have confirmed that schools are aging and are in need of costly repair and renewal. In response, Georgia's legislature has granted local school districts constitutional authority to propose, and if approved by the voters, impose an E-SPLOST. The purpose of the E-SPLOST is limited to capital expenditures or to retire prior indebtedness due to capital expenditures. Given the substantial increase in capital outlay expenditures from 1994 to 1999, as noted by Sielke (2001), the E-SPLOST provision dramatically and positively impacted funding for capital outlay in Georgia. What is not known is the relative degree of benefit the E-SPLOST has provided to each district in Georgia. By analyzing intra-district capital outlay expenditures before and after the E-SPLOST, the economic impact of the E-SPLOST can be evaluated in terms of relative usefulness and capacity to all participating school districts in Georgia.

An equity analysis of the E-SPLOST is of great utility to policymakers and those with vested interest in public school funding, however added value can be realized through a correlation of student performance results on the Scholastic Aptitude Test with pre and post E-SPLOST spending. If, as some researchers suggest (Picus, Marion, Calvo & Glenn, 2005; Roberts, Peter, & Edgerton, 2008), the quality of a school facility

impacts student learning, then deciding how to best meet the financial requirements to provide quality school facilities is even more critical.

## CHAPTER II

### REVIEW OF RELATED LITERATURE

The purpose of this chapter is to review pertinent research and professional perspectives related to this study. An examination of the theoretical framework for the study is followed by a review of pertinent research and literature regarding the grouping and intervention variables utilized in the analyses. The primary focus of the study was to understand how the E-SPLOST has impacted Georgia's school districts, in general, and as related to districts' associated geographic and socioeconomic characteristics. Accordingly, information and research concerning the impact of a school district's location (urban or rural) and local fiscal capacity (high or low) on capital outlay was addressed. Since the study examined the opinions of local leaders including superintendents, board members and legislators concerning the E-SPLOST, associated theory and research pertaining to unity of political elites are addressed initially.

Next, several state-level court decisions regarding school funding equity lawsuits were synthesized to illustrate the past and current approaches employed by litigants in seeking financial fairness in school funding. General funding, grant funding, and local taxation in support of schools in Georgia were also explained to provide a financial context for the study. Regulatory information including Georgia case-law, state statutes and Georgia School Board (2010) policy were summarized in order to frame the pertinent statutory underpinnings of the study.

Lastly, a secondary part of the study sought to determine any relationships between post E-SPLOST expenditures and achievement differences as operationalized through students' performance on the math section of the Scholastic Aptitude Test

(SAT). Accordingly, background information and research concerning the impact of the school facility and capital equipment on student achievement was examined.

### Theoretical Framework

The theoretical foundation for this study addressed three tenets: (a) the fiscal relationship between state and local government; (b) the redistribution of resources as a catalyst for social justice; and (c) unity of local elites as an influential factor on the decisions of voters. The first tenet explores the fiscal relationship between the state as an entity of government and more localized entities of city and county governments. Commonly referred to as the Dillon Rule, a general political theory exists which asserts that all local governmental authority is bestowed through the oversight of the dominant state government. Home rule, however, is the antithesis of the dominant to subordinate power paradigm associated with Dillon Rule theory (Gere, 1982). Home rule political power is granted by way of a state-level authority; however, once granted, local authority can be exercised freely without interference by the state. Both the Dillon Rule and home rule are examined later in this review, since the statutory allowance for the E-SPLOST is an example of home rule authority granted by the Georgia legislature.

The second tenet is the ongoing debate and variance of socio-political perspectives regarding the redistribution of resources as a means for social justice. As a central contributor to the topic, Rawls (1971) provided a two-pronged definition for social justice. The first supports the protection of the equal rights and basic liberties bestowed on individual citizens. The second advocates distribution of revenue and opportunities to those with the greatest need. Young (1990) defines social justice as the morally proper distribution of social benefits and burdens among society's members.

Young's definition advances that of Rawls by suggesting the distribution of resources should be sensitive and purposeful in the fulfillment of what is morally just, not simply an act of charity.

A nexus can be established between the theoretical aspirations associated with social justice, as defined by Young (1990), and interventions associated with Georgia's mechanisms for funding local districts. As examples, the categorical redistribution of funds established by the Quality Basic Education Act (1986) and the awarding of low-wealth capital outlay grants are not charitable acts authorized by law; they represent morally just interventions intended to level the funding playing field for Georgia's school districts.

The third tenet of the theoretical framework involves local political power and the influence on voters of unity or disunity amongst those in positions of political importance. Utilizing the E-SPLOST requires the approval of a simple majority of voters. Gaining the approval of voters hinges on the ability of local and state leaders and political elites to communicate the purpose and worth of the tax in the context of the local district's capital needs. The elite unity theory proposed by Zaller (1992) is relevant to the success or doom of a local E-SPLOST referendum:

When elites uphold a clear picture of what should be done, the public tends to see events from that point of view, with the most politically attentive members of the public most likely to adopt the elite position. When elites divide, members of the public tend to follow the elites sharing their general ideological or partisan predisposition, with the most politically attentive members of the public mirroring most sharply the ideological division among the elite (pp. 8-9).

Shock (2010) posits that “local politics is very different than national politics because of the ability of one or a few people to have a significant impact on decisions” (p. 28). The imposition of a local tax via public referendum is an event influenced by a relative few, as Shock suggests. Understanding theory related to localized political groups and their activity is addressed as part of the study’s theoretical basis.

*State and Local Fiscal Relations: The Dillon Rule Versus Home Rule*

The relationship between state and local governmental entities with regard to fiscal power is often a source of tension (Silva, 1999). While each level of government has specific responsibilities for providing public services, often state and local government responsibilities overlap; this can lead to uncertainty with regard to ultimate responsibility or authority. Gossett (2005) posits that no matter the debate regarding degree of power, all forms of local government exist as subordinates to their parent state government. This theory of state preeminence is commonly referred to as the Dillon Rule.

The Dillon Rule originated as a result of a legal dispute in Iowa in 1868 when the construction of a railroad upon the roads of the city of Clinton was halted by a trial court injunction. The basis for the injunction granted in favor of Clinton was the absence of local government consent for the Cedar Rapids and Missouri River Railroad Company to construct a railroad upon the streets of Clinton. The railroad company, however, countered by claiming that it was merely acting in accordance with the requirements of a grant awarded by the state legislature. Eventually, Judge John Dillon issued an opinion on behalf of the Iowa Supreme Court which dissolved the trial court’s injunction, thus permitting the construction of the railroad. Judge Dillon’s opinion asserted that

“municipal corporations owe their origin to, and derive their powers and rights wholly from, the legislature; it breathes into them the breath of life, without which they cannot exist” (*The City of Clinton v. The Cedar Rapids and Missouri River Railroad Company*, 1868).

According to the League of Women Voters of the Fairfax Area Education Fund (2004), the majority of individual states still operate under the premise of the Dillon Rule. Other states provide counties or local municipalities the opportunity to operate under a premise contrary to the Dillon Rule known as home rule. Home rule is derived either through an Act of a state legislature or through a charter that grants a particular municipality greater autonomy to govern its citizenry without interference from the state (Columbia Electronic Encyclopedia, 2011).

The *Georgia Constitution* under Article IX, Section 2 expressly affords home rule autonomy to each county:

The governing authority of each county shall have legislative power to adopt clearly reasonable ordinances, resolutions, or regulations relating to its property, affairs, and local government for which no provision has been made by general law and which is not inconsistent with this Constitution or any local law applicable thereto (p. 67).

This constitutional provision of home rule is not extended to nine specific areas of statutory oversight however. Included in the prohibited areas is action involving any type of taxation beyond that approved by law or the constitution and action affecting any public school system. These explicit constitutional exclusions to home rule made it necessary for Georgia lawmakers to enact a Constitutional amendment to make the E-

SPLOST available to county and city governments. The constitutional allowance of a locally imposed E-SPLOST represents a relaxation of the home rule exclusion with regard to taxation.

The timing of the E-SPLOST amendment coincided closely with the release of the United States General Accounting Office's report (1996), which highlighted the estimated breadth and cost of capital outlay needs across the country and within the individual states. Rather than impose a state-directed tax which could be redistributed by the state to localities according to need, the state prompted localities to define and fulfill their needs by extending the legal authority to tax locally through an E-SPLOST referendum. The E-SPLOST as a home rule provision can be viewed as a redistribution of the means for raising funds versus the state imposing and collecting tax dollars for redistribution to local school districts according to need. As such, past and current viewpoints with regard to resource redistribution by governmental authority represent an important tenet of this study's theoretical framework.

The establishment of a holistic system for education is the constitutional responsibility of the Georgia General Assembly. Problematic to maintaining a system that provides for all students adequately are the inter-district financial inequities across Georgia's school districts. Notable differences exist with regard to property wealth and localized public service needs. Briffault (1990) offered that "these differences arise out of the uneven distribution of industrial and commercial facilities and of rich and poor people, and out of the freedom of investors, businesses and people to migrate between localities" (p. 19).

Funding for public education in Georgia emanates from different sources; however, general funding from the state, and local funding raised by the county or city represents the majority of these resources. According to the Georgia state constitution, the Georgia legislature is accountable for providing an adequate education for all students. However, because counties and cities raise a large portion of the funding used to support education, the state only possesses the power to distribute about half of the total funding used statewide to educate Georgia's students. Having all the responsibility, with authority to distribute only part of the funding, creates a fiduciary paradox that state leaders are left to resolve through legislation. In Georgia, such legislation was enacted in 1996 when an amendment to the Georgia Constitution made the E-SPLOST a viable and potentially lucrative source of capital outlay funding for local school districts. Georgia's constitutional E-SPLOST provision is an explicit example of home rule being extended from state-level lawmakers to local county or city units of government.

#### *Social Justice and the Redistribution of Resources*

At its theoretical core, egalitarian thought demands justification and remediation for inequalities in life prospects that arbitrarily fall on people (Arneson, 2000). Liberal egalitarianism takes a unique stance with regard to equal opportunity by holding society accountable for the protection of its members against consequences that are beyond their control, but not protection against outcomes associated with factors within one's control (Roemer, 1998). The obvious challenge with Roemer's definition is determining which factors are within the control of the individual and to what extent. Roemer's desire for societal protection from consequences beyond the control of individual members is, in

spirit, related to the funding mechanisms Georgia uses to distribute various avenues of funding to school districts.

Through the Quality Basic Education Act (QBE), Georgia engineered a state fiscal equalization scheme that includes equalization grants and differentiated funding based on students' membership in any of 19 instructional programs. Such characteristics of the QBE funding mechanism suggest recognition on the state's part that the local fiscal capacity is beyond the control of the local unit of government and that specific state interventions are necessary to ensure adequate financial support. Committing to equality for all students may be agreeable conceptually; however, tension arises when money acquired via local levies from one county is redirected to another at the direction of the state. Instinctively residents in the affording county view this relationship as one-way, with no corresponding benefit for their students. Despite such objection, the state has little choice, given its statutory obligation to provide an adequate public education for all of its citizens, no matter where students reside.

The QBE formula is used to support each district's yearly operating budget; however, QBE does not address long-term financial needs associated with capital improvements to school facilities. Instead, the Georgia Department of Education is authorized by law (LexisNexis, 2010) to administer funds intended to help offset capital outlay costs through three general means of distribution: (a) entitlement – the distribution of a maximum portion of the total state funding available per fiscal year based on a district's need; (b) exceptional growth – funds for districts that qualify as experiencing exceptional yearly growth in student population; and (c) capital outlay grants for qualifying low-wealth districts. Basing district capital outlay funding on defined and

relative needs of districts through entitlement funding and targeted grants, such as the low-wealth capital outlay, helps ease disparities between Georgia's school districts. In contrast, allowing the quality of a school facility to correlate positively with the local fiscal capacity of the individual school district with no intervening strategies such as the QBE or capital outlay provisions suggests a more meritocratic than egalitarian system (Hing et al., 2011).

Both the QBE and the differentiated grant funding for capital outlay in Georgia aim to remedy imbalances and potential disadvantages associated with variations in local fiscal capacity. Such systems align well with the beliefs of Young (1990), who stated that socially just systems allow for a morally proper distribution of benefits and burdens among society's members. Cooley (2010) also adds that "a just society cannot neglect the paradox of cumulative disadvantage and maintain any reasonable orientation towards social justice" (p. 35).

#### *Elite Unity Theory*

Increasingly, the sales tax has emerged as a popular option for local governments to raise revenue. Goldman and Wachs (2003) assert that "local option taxes have become the levers by which communities ensure that favored but expensive projects are built" (p. 20). The increasing popularity of the sales tax is due in part to its being less visible, given that it is collected over time in smaller amounts (Stein, Hamm, & Freeman, 1983). Another reason favored by property owners is that it is imposed on all consumers equally, as opposed to the property tax, which is shared exclusively amongst property owners (Jung, 2000). The fact that the sales tax is generally deemed by critics to be a regressive form of taxation, in that as income diminishes, the proportion of income that goes to sales

tax increases, seems to have little impact on these perceptions. Property owners represent a strong coalition of voters when it comes to a local referendum. McCabe (2010) found that homeownership is associated with an increased likelihood of voting in local elections. In a study regarding Georgia's Special Purpose Local Option Sales Tax (SPLOST) for general infrastructure (non-Education), Jung (2000) found that counties that had a high percentage of homeowners tended to adopt the SPLOST earlier than others. Given this evidence, it stands to reason that earning the support of property owners is critical if local tax levies are to be approved.

According to Zaller (1992) elite unity theory implies that the voting public will tend to follow the lead of the elites when it comes to formulating an ideological or partisan predisposition. School district leaders, board members and other elite political figures can leverage elite unity ideology with their community to help secure approval for local referenda such as the E-SPLOST. In a study examining the impact of elite unity on public support of tax referenda to support the construction of sports venues, Paul and Brown (2001) found that public support increases and decreases significantly with the degree of elite unity.

For this study, district superintendents, school board members and state legislators were regarded as primary members of the political elite. As stipulated in the Constitution of the State of Georgia, local boards of education are required to communicate the specific capital outlay projects to be funded by the E-SPLOST (GA Const., art. VIII, § 6). To do so suggests that school district leaders must communicate and utilize a unifying process to assess and prioritize existing and future capital outlay needs with voters.

The fact that 178 out of 180 school districts in Georgia have successfully utilized the E-SPLOST suggests that voters in Georgia generally support the tax for new or improved educational facilities. The ideology associated with the E-SPLOST can be associated with three theoretical constructs. First, the state has granted permission for localities to assess the tax as a matter of home rule. The E-SPLOST, as a provision of home rule, prompts localities to define, prioritize and secure the funding needed to construct, renew or equip their educational facilities. In essence, the state has redistributed the means for acquiring resources to localities favoring a more direct democracy (Boehmke & Bowen, 2010) for determining and funding capital outlay needs. Placing greater tax control in the hands of local voters is a viable way for state legislators to assist localities while distancing themselves as catalysts for new taxes (Green & Baker, 2002). While the E-SPLOST represents a potentially lucrative opportunity for localities, it is worthless absent the approval of the voting public. Of interest to this study then was political influence such as Zaller's (1992) elite unity theory in relation to the E-SPLOST. Any relationships between the opinions of school district superintendents and board members and changes in capital outlay expenditures associated with the E-SPLOST may further solidify unity theory as a relevant factor in the success or demise of local referenda.

### Litigation and Education Funding

As of 2008, forty-five of the fifty United States have witnessed legal challenges to their K-12 public school financing system (Costner, 2009). In the past two decades, plaintiffs generally hinged their cases on whether or not the state government is providing educational services to the substantive standard prescribed by the constitution. Prior to

1989, however, challenges were largely based on claims that inequities in state funding systems amounted to a violation of the equal protection clause of the United States Constitution (Rebell, 2004). Such assertions fared poorly after the U.S. Supreme Court ruling in *Rodriguez v. San Antonio*, in which the Court concluded that state systems of finance that included substantial revenues from local property taxes did not violate the Equal Protection Clause (Odden & Picus, 2008).

The impact of funding disparities on school facilities has often been included in legal challenges to state funding systems. *Pauley v. Bailey* (1982) was a West Virginia case in which the court specifically addressed capital outlay and facilities. The court found that the state had failed to meet its constitutional responsibility in providing an adequate and efficient system of education for its students. In response to Pauley, the state developed A Master Plan for Public Education that included specific requirements related to educational programs, enunciated considerations for educational facilities, and a directive to amend the system for financing education costs. The court also concluded that all direct and indirect costs of educational programs had to be included in the state financing procedures. This ruling was important in that it deemphasized the role of local financial effort and necessitated specific state intervention in order to remedy existing disparities.

Additional criticism of systemic inequity caused by a heavy reliance on property tax as the basis for state funding systems was levied by the Ohio courts in *DeRolph v. State* (1997). Just as in *Pauley*, the court found that the public school financing procedures violated the State of Ohio's constitutional provision for a thorough and efficient system of common schools.

The inherent inequities of funding systems that rely too much on local property taxes not only are extremely difficult to rectify, but also run counter to our Constitution's explicit requirement for a *statewide* system of public schools. The valuation of local property has no connection whatsoever to the actual education needs of the locality, with the result that a system overreliant on local property taxes is by its very nature an arbitrary system that can never be totally thorough or efficient. (*DeRolph v. State*, 1997, "Westlaw," p. 9).

Over the past two decades, a second generation of legal challenges has highlighted dissonance between funding and adequacy, or similar constitutional clauses pertaining to minimal educational standards. Recently, cases based on adequacy standards have determined the school facility to be an essential component of an adequate education (*Roosevelt Elementary School v. Bishop*, 1994; California Department of Education, 2013). Another landmark case alleging default of constitutional rights pertaining to education was *Leandro v. State of North Carolina* (1997). In *Leandro*, plaintiffs argued that the state funding system for education violated the state's constitution and various state statutes "by failing to provide adequate and substantially equal educational opportunities for all school children in the state." The court ruled in *Leandro* that the constitutional obligation of the state to provide a sound, basic education to all students, was not satisfied (Schofield, 2003). Further, the court established standards to help define a sound, basic education which included aid for at-risk students. The court's decision aimed to ensure an adequate level of resources for all students to meet performance targets on state standardized testing (Gillenwater, 2006).

Similar in part to *Leandro v. State of North Carolina*, plaintiffs in *Rose v. Council for Better Education* (1989) based their challenge of the Kentucky education finance

system on the minimum standard of educational adequacy. Dissimilar to *Leandro* in part, *Rose* did not emphasize the unequal distribution of expenditures throughout the state. Instead, the lack of funding in some districts was touted as prohibitive to the goal of universal opportunity to meet minimum educational standards (Thro, 2009). The decision in *Rose* was impactful in that the court declared the state's common school finance system to be unconstitutional and the system of common schools to be inefficient. In part, the ruling stated that Kentucky had “fallen short of its duty to enact legislation to provide for an efficient system of common schools” (*Rose v. Council for Better Education, 1997*).

#### *Educational Funding Litigation in Georgia*

School funding issues have also been litigated in Georgia. In *McDaniel v. Thomas* (1981) the state funding system was challenged. The court found the state method for school financing unconstitutional and concluded that the system of funding was in violation of equal protection. The court did not find, however, that violating equal protection amounted to an abdication on the part of the state in providing an adequate education to students. Subsequent to *McDaniel*, the state legislature articulated a new state funding formula via the Quality Basic Education Act (QBE). Two aspects of the court’s ruling in *McDaniel* are relevant to this study. First, the court affirmed that “disparities in funding also affect ... the condition of school buildings and grounds” (*McDaniel v. Thomas, 1981*). Second, the court opined that “the ‘adequate education’ provision of the Constitution does not restrict local school districts from doing what they can to improve educational opportunities within the district, nor do they require the state to equalize educational opportunities between districts” (*McDaniel v. Thomas, 1981*).

This paradoxical opinion suggests that there is no legal objection to inequitable educational opportunities, provided that each student of Georgia is afforded adequate educational services per the constitutional standard, a conclusion that is consistent with more recent school finance decisions in other states. Interestingly, however, the court declined to address adequacy as a legal threshold in its decision. Instead, the *McDaniel* court stated that “it is primarily the legislative branch of government which must give content to the term adequate.” Soon after and in response to the court’s *McDaniel* opinion, the state unanimously passed the Quality Basic Education Act, which included a local fair share provision in an attempt to bring better equity to fund distribution across all of Georgia’s districts. Local fair share is a mechanism through which the state collects and then reapportions statewide property tax receipts based on local wealth (Georgia School Boards Association, 2012). While the court in *McDaniel* articulated that adequate funding does not require equal funding, state lawmakers made a purposeful attempt to neutralize wealth disparities through the local fair share provision. Balancing the state’s interest in equity with the desire of district Boards of Education for local control is a difficult prospect.

This conflict is particularly apparent with regard to E-SPLOST funding for school construction and renovation. E-SPLOST is a county-initiated and county-collected tax. Simply put, what is collected in the county remains in the county since there is no local fair share provision applied to E-SPLOST contrary to general school tax proceeds. This means that state policymakers have no ability to regulate equity across local districts with regard to E-SPLOST funding and expenditures. It is logical to predict that counties that host greater consumer spending will in turn collect a larger, disproportionate amount of

E-SPLOST funding and will consequently have greater capacity to provide more modernized and robust educational facilities for their students (Rubenstein & Freeman, 2003).

Despite the changes made to state funding procedures as a result of *McDaniel*, legal challenges concerning state funding for education have continued in Georgia. A trial was scheduled to begin October of 2008 to hear a case lodged against the State of Georgia by the Georgia School Funding Association. The Georgia School Funding Association (2009) asserted that “the funding formula, which is supposed to provide an adequate foundation of state support in every school, is not a realistic measure of the cost of providing even the most basic instructional program in every school” (p. 6). This assertion represented the basis for their lawsuit; however, the suit was never tried. In September of that year, funding for senior judges was abruptly ended and the presiding judge assigned to the case was removed. A new judge was assigned to the case; however, the Georgia School Funding Association elected to withdraw the case without prejudice in order to preserve the opportunity for a future lawsuit if needed.

#### *Georgia’s State Education Finance Study Commission*

In May of 2011, Georgia Governor Nathan Deal signed into law Georgia House Bill 192 (HB 192) which establishes a 20 member representative commission charged with evaluating the QBE formula and other programs or matters related to education funding in Georgia. Georgia HB 192 identifies capital outlay funding as one area in need of review. The bill first requires that all capital outlay funding programs be reviewed to ensure each is effective and adequately funded; and second, requires an

answer as to whether and/or for how long the current capital outlay programs should be extended given they are currently scheduled for sunset in June of 2015.

In August, 2011, the Georgia State Education Finance Study Commission (SEFSC) unanimously voted to approve recommendations to modify and improve the state capital outlay program. Subsequent to this vote, a white paper was released which included a description of the current landscape regarding capital outlay needs and funding, as well as the specific recommendations for modifying and improving the state's current capital outlay program. The paper includes findings that suggest shortcomings of the current system. The SEFSC notes that according to the Georgia Department of Education, \$2 billion in funding could be justified and approved through the capital outlay assistance programs. This amount was projected on the state scale for cost reimbursement. When total project costs (state and local funding) were considered, the total statewide need jumped to \$8 billion. For the corresponding year, state funding made available for the regular capital outlay assistance program was capped at \$200 million. As a result of this stark disparity (\$8 billion in need versus \$200 million appropriated), the State Education Finance Study Commission (2012) concluded that "the [state capital outlay] program is not able to meet the needs of systems in a timely manner" (p. 4).

Notable recommendations of relevance to this study were made concerning capital outlay programs intended to assist low-wealth school districts. First, the SEFSC examined the regular advanced entitlement earning program. Regular advanced entitlements are intended to provide entitlements more expediently for small and/or poor districts since earning sufficient funding through the regular entitlements would take much more time in contrast to the rate at which larger systems earn. However, according

to the Georgia Department of Education (2011), many large and relatively wealthy school districts are qualifying and consuming the advance entitlement funding meant to assist smaller, less wealthy districts. Second, the SEFSC found the criteria associated with the low-wealth program to be prohibitive since many school systems that should benefit were not. One reason is that one of the criteria for low-wealth eligibility is to already be expending regular advanced entitlement earnings. In many cases smaller districts cannot afford the local dollars needed to maintain multiple projects. As stated by the State Education Finance Study Commission (2012):

One of the biggest issues is that in order to be eligible for a Low-Wealth project, a system must already be in Regular Advance funding. However, systems that are truly poor often cannot afford to have two projects ongoing at the same time (p. 5).

#### Education Funding in Georgia

The following is a synopsis of how state and local funding is acquired by school districts in Georgia. There are sources of funding such as federal title grants, donations and school foundations that typically represent a relatively small part of school districts' budgets. For the purpose of this study, however, local funds procured primarily through property tax and state funds provided largely by state income and sales taxes are examined. The following sections highlight the relationship between state and local funding and differentiate yearly operational funding from more long-term capital outlay revenue.

### *Local Yearly Funding*

Counties and cities in Georgia are authorized to impose and collect a general property tax within their jurisdiction. According to law, real and personal property is assessed at 40 percent of fair market value for purposes of local taxation (The Official Code of Georgia, 48-5-353). The rate at which the property tax is assessed is calculated in terms of mills, with one percent of the assessed value equal to ten mills. Each school board in Georgia is authorized to set the yearly millage rate for school taxes up to 20 mills (GA Const., art. VIII, § 6).

Recently, staff from the Georgia Department of Education presented information to the equalization subcommittee of the Georgia Education Finance Commission, which showed local funding accounting for nearly 50% of educational costs in fiscal year 2010 in contrast to fiscal year 2002 when the state relied on local revenue for 40% of yearly operation costs (Georgia Department of Education, 2011). Over the past decade, the state has become much more reliant on localities to cover the yearly operational costs for education. Since property values and subsequent property tax digests can vary widely from county to county, the state has relied on the state-calculated Quality Basic Education (QBE) formula to address economic disparities between localities.

### *State Yearly QBE Funding*

In 1985 the Quality Basic Education Act (QBE) was passed unanimously by the Georgia General Assembly as an attempt to more equitably support the financial needs of Georgia's school districts. In adopting the QBE, the state affirmed its statutory obligation, as stated in Georgia School Laws from LexisNexis (2010), to provide "an equitable public education finance structure which ensures that every student has an

opportunity for a quality basic education, regardless of where the student lives” (p. 73). The QBE includes a formula which is used to calculate the amount of funding each district receives. Money is awarded to each district through categorical grants such as an amount for professional learning, another amount for transportation, and the like. Each categorical grant is based on a per student foundation formula which is weighted to accommodate for differences between 19 distinct educational program classifications of students. Such a formula affirms that the state understands that educating some students is more expensive, on average, than the expense of educating others.

In an attempt to remedy local yearly funding inequalities between school districts, the QBE formula requires that each school system have 5 mills worth of property tax, based on a state-determined equalized tax digest deducted from their annual earnings. More commonly referred to as a local fair share, the statewide total deducted from school districts is then re-distributed in the form of differentiated equalization grants. How much a particular locality receives or does not receive is predicated on its percentile ranking with regard to local property wealth per student. The lowest 75% of districts qualify for equalization grants drawn from the local fair share (Georgia School Boards Association, 2012).

#### *State Funding for Capital Outlay*

The QBE Act speaks to both year-to-year operational funding and capital outlay funding; however, distinct methodologies are used respectively to offset localized wealth disparities. In contrast to the local fair share associated with yearly operational funding described above, capital outlay funding is made available through five programs for grants: Regular, Regular Advanced, Exceptional Growth, Low Wealth, and Merger.

Each of these funding programs is operated as a state-local partnership, with state dollars representing only a portion of the actual cost.

Local school systems are made eligible for funding through the capital outlay programs through need, as represented in a state required five-year local schools facility plan, or exceptional increases in student enrollment. The local schools facility plan, more commonly referred to as the five-year plan, is the foundation for determining local eligibility for capital outlay dollars in any of the five programs as a percentage of the state eligible project cost (Georgia Dept. of Education Rule 160-5-4-.04). State eligible project costs are essentially the rates at which districts may be reimbursed, not the actual costs. The rates are based on the square footage of the school or space to be built or modified.

It has been argued that state-calculated eligible project costs are unrealistic and that the methodology used to determine capital outlay reimbursement funding is insufficient to adequately meet the instructional needs of Georgia's students (Georgia School Funding Association, 2009). According to LexisNexis' (2010) compilation of Georgia's school laws, each district is required to fulfill their local participation requirement, which by law "shall be no more than 20% nor less than 8%" (p. 153). The percentage the school district ultimately receives is based on a local wealth factor that is determined by averaging the local property tax wealth factor and the local sales tax wealth factor. The key difference between yearly operational funding and capital outlay funding is that the former is equalized through grants backed by the local fair share provision. Capital outlay funding is not equalized. Rather, regular state capital outlay funding is rationed proportionally to the needs districts express in a five-year facilities

plan and to the amount of funding made available in the yearly appropriations bill from the Georgia General Assembly. The state does provide two avenues for low wealth districts to seek capital outlay dollars above and beyond regular entitlements earned from year to year.

### *Capital Outlay*

The capital outlay program in Georgia provides assistance to local school systems for the construction of new facilities and for additions, renovations and modifications to existing structures. Capital outlay dollars are usually appropriated by the Georgia Department of Education through three general categorical grants: regular, exceptional growth, and low wealth. School systems are deemed eligible for funding through the state program based on needs articulated in each district's five-year Local Facilities Plan (LFP) and student growth as reflected in periodic state required student counts. The development of an LFP at least once every five years is required by state law (Official Code of Georgia, § 20-2-260). Further, the data provided in the LFP serves as the basis from which capital outlay grants are calculated and awarded to individual school districts.

The LFP requires that local districts codify their existing inventory of school facilities so that the age of the building and any renovations, resulting in additional instructional space since original construction, can be tracked. Additionally, current blueprints are included to illustrate aspects of each school facility in terms of instructional units or classrooms and the corresponding square footage of instructional and non-instructional spaces within the building. The establishment of the LFP across all districts allows the state to assess and forecast statewide needs by totaling the needs of all districts for any given fiscal year. In turn, the state then determines a ratio of need for

each school district by dividing any given system's need by the total state needs. Once calculated, the individual district's ratio is multiplied by the annual amount authorized by the General Assembly as part of the yearly appropriations budget. Such a data-driven system for distributing funds seems fair; however, according to the Georgia Department of Education (2011), for fiscal year 2012, \$63,082 in entitlement earnings was awarded for every one million dollars in need articulated as part of a district's LFP.

### *E-SPLOST*

Traditionally, school districts have used general obligation bond indebtedness as a means of financing construction and renovation costs. Using bonds to secure revenue needed for school construction creates a strong nexus between local property wealth and ultimately the school facilities accessed by students of the local district. Sielke (2001) points out that a "reliance on local bond issues raises equity issues for students and taxpayers alike as bond issues are inextricably tied to property wealth" (p. 657). According to the Georgia Department of Education, in the first year of E-SPLOST availability, 131 of Georgia's 158 districts sponsored an E-SPLOST referendum and of these, 123 were passed. In the case of 74 districts, voters approved the E-SPLOST with the understanding that the proceeds would be used in part to retire existing bonded indebtedness (L. Haase, personal communication March 2, 2010). This offers testament that the E-SPLOST has been embraced by Georgia districts and communities as a substantial and preferred strategy for funding school facility needs.

Since 1997, all but two of Georgia's 180 school districts have utilized an E-SPLOST consumption tax for school construction and renovation costs. In contrast, prior to 1997 bonds repaid through property taxation served as the funding source for school

construction and renovation. Subsequent data reveal a large increase in capital outlay expenditures since the advent of the E-SPLOST.

### The School Facility and School Outcomes

Common logic leads one to believe that a cleaner, more pleasant school environment will positively impact the attitude and performance of the student inhabitants. This hypothesis is supported by the research of Maslow and Mintz (1956) who examined the effect of surroundings on the productivity of individuals. The subjects of the study were placed in one of three rooms and asked to rate pictures of peoples' faces with regard to their energy and well-being. The aesthetic quality of each room was controlled for and categorized as ugly, average or beautiful. The responses of the study's subjects correlated significantly depending on the quality-type of the room. Subjects situated in the ugly rooms gave lower ratings while those situated in beautiful rooms afforded higher ratings. In a follow up study, Mintz (1956) sought to determine if the subjects' surroundings, either ugly or beautiful, had long-lasting effects. Unlike the aforementioned study, where the subjects were stationed in the room for ten minutes, Mintz's study required each participant to remain in the room for several one or two hour sessions, which in total equaled eight hours. The results yielded an even greater divide between those in the ugly room, who expressed feelings of monotony, fatigue and irritability, and those in the beautiful room, who expressed feelings of comfort, pleasure, importance and a desire to continue with the task. The conclusions of Maslow and Mintz are important, particularly when one considers the overall condition and aesthetic quality of the school buildings that students inhabit each day.

The body of research and professional opinion surrounding the school facility as a factor in student achievement is limited; however, the scant body of literature conveys mixed conclusions. Picus, Marion, Calvo and Glenn (2005) point out that most studies aimed at linking facilities to student achievement have been “plagued with methodological problems and, not surprisingly, produce conflicting, ambiguous results” (p. 73). Nonetheless, Picus et al. (2005) point out that “if high-quality facilities play a role in student achievement, then even in highly equalized school funding systems, disparities in the quality of school buildings will still leave some children at a disadvantage” (p. 73). Earthman (2002) supports the notion that disparities in school facilities can negatively impact student achievement, stating “where students attend school in substandard buildings they are definitely handicapped in their academic achievement” (p.1). He adds that “overcrowded school buildings and classrooms have been found to be a negative influence upon student performance, especially for minority/poverty students” (p. 1).

The findings of Roberts, Peter, and Edgerton (2008), while less specifically addressed to the relationship between facilities and achievement were unambiguous, These Canadian researchers utilized 1,110 principal survey responses to examine the relationship between the perceived adequacy of respondents’ school facilities and two general aspects of the learning environment: student morale and commitment and teacher morale and commitment. The study found that “in all cases, schools in top ranked facility condition have better learning environments than schools in bottom ranked condition” (p. 50). In response to their findings, the authors outline a manifest for appropriate educational facilities across four propositions. First, they contend that an

educational facility should be pedagogically functional to include a comfortable thermal climate, proper lighting, high indoor air quality, and acoustical control. Second, schools should support the instructional delivery of the curriculum through appropriate laboratories, rehearsal spaces, and special needs accommodations. Third, the aesthetic condition of the school expresses a clear message about the importance of the educational work. Consequently, the facility should be a source of pride for the students and faculty. Finally, schools should foster safe and healthy environments for their occupants (Roberts, Peter & Edgerton, 2008).

Tanner (2009) conducted a study that included a sample of more than 10,000 fifth grade students from 71 schools across 19 distinct districts in Georgia. Factors associated with a school building's ability to facilitate movement and circulation of students, the existence of day lighting, and access to outside views or views at least 50 feet beyond the classroom were identified as the independent variables. Each of the building design features studied (movement and circulation, day lighting, views) were found to correlate significantly with effects on student outcomes with regard to five sections of the Iowa Tests of Basic Skills.

O'Sullivan (2006) examined 205 randomly selected high schools in Pennsylvania to determine if the condition of the facility had any impact on student performance. Data on the condition of the facilities were obtained using survey data collected from the schools' principals. The study controlled for performance variance attributable to the socio-economic status of students and found that as building conditions improved, so did achievement on the Pennsylvania state assessment for high school students.

Bullock (2007) examined the impact of the school facility on middle school students whose achievement placed them in either the top or bottom quartile on the state-developed Standards of Learning (SOL) test in Virginia. Data pertaining to building condition and student achievement were collected from 111 Virginia middle schools. After controlling for the socio-economic status of students as a covariant in his analysis, Bullock determined that students housed in newer or recently renovated buildings performed better than their counterparts attending lower quality facilities.

The attitudes of students are also impacted by the environment through which they are educated (Ferreira, 1995). Nationally, the culture maintains a general expectation that schools be safe and nurturing places for children to learn. Goodlad (1984) concluded in his examination of 38 schools that parents “expect for their children to be in a safe school, to be known by someone in the school and provided individual attention in both instructional and personal areas” (p. 37).

Students are very much aware of their school buildings. According to her synthesis of fifty-three studies concerning school facilities, Lemasters (1997) found that students who are housed in less aged school facilities realize increased mathematics and reading scores. More specifically, she concluded that the overall condition of the building, lighting, and site noise were significant variables with regard to student achievement. Other researchers also identified significant correlations between the age or condition of school facilities and student achievement. Syverson (2005), found a significant correlation between student performance on the Indiana Statewide Test for Educational Progress and the condition of the school building. Likewise, Crook (2006) found significant differences in student achievement on the Virginia English writing and

reading Standards of Learning (SOL) examinations when compared to the assessed condition of the school facility. Each of these studies found significant relationships between the overall condition or design aspects of school buildings and the academic performance of students.

Contrarily, Picus, Mario, Calvin, and Glenn (2005) used test scores and data related to building conditions in Wyoming to conclude that no relationship exists between the quality of the school facility and student performance. In addition, they suggest that other studies, such as the synthesis of 232 studies on the topic by Earthman and Lemasters (1998), fail to control well enough for other factors associated with student achievement. Despite these contradictory stances, research supports the notion that the quality of a school facility is related to the achievement of the students and the attitude and motivation of those who teach or work in the learning environment. Edwards states in her study (as cited in Lemasters, 1997) that “good infrastructure is truly at the base of a quality education. For a society searching for ways to address the educational needs of the future, the building itself is a good place to start” (p. 206). While causal connections between school outcomes and school facilities have been very difficult to support, it does seem reasonable to theorize that the impact of the school facility on student achievement may be mediated through other variables such as staff morale or more generally, the social climate of the building. Roberts, Peter, and Edgerton (2008) found this a plausible relationship, as did Maslow and Mintz (1956), albeit in different contexts. If the quality of the school facility is an impactful variable whether mediated or not, then it is plausible to conclude that access to a constitutionally guaranteed adequate education hinges in part on facilities that support equal opportunity for all students to achieve.

## Summary

The preceding pages of this chapter provided a review of relevant research, litigation, legislation and professional perspectives on the major tenets of this study. The theoretical underpinnings for this study include the fiscal relationship between state and local government, the redistribution of resources as a catalyst for social justice, and unity of local elites as an influential factor on the decisions of voters when taxation issues such as the E-SPLOST are decided by local referenda.

Next, Georgia law and state education rules were used to describe the current methodologies associated with funding school systems. Included in the review was information pertaining to yearly QBE funding as well as an exhaustive description of the state's capital outlay reimbursement program. A review of relevant state-level court cases was included to illustrate how state constitutions provide minimal standards for education; and, how past rulings such as the *Rose* case in Kentucky courts have held states accountable for delivering on constitutional promises.

Lastly, pertinent research concerning the school facility and the impact of the schoolhouse on student outcomes was examined. While conclusions are mixed and criticism regarding past studies' methodology exist, further examination of capital outlay as an influence on student achievement is merited. The following chapter provides a more in depth description of the inquiry associated with this study.

## CHAPTER III

### METHODOLOGY

This chapter of the study provides a description of the participants, their roles and responsibilities, as well as the participant school districts. Further, it addresses the overall design of the study and specifies the research questions that were pursued. The independent and dependent variables are identified and the specific statistics used within the context of the study are described. This chapter also clarifies the origin of the archival data, the construction of the survey instruments, and the processes for collecting data. Lastly, the statistics and analyses that were used to draw inferences from the data are addressed.

#### Research Questions and Hypotheses

Since November of 1996, all but two of Georgia's 180 independent school districts utilized at least one voter-approved Education Special Purpose Local Option Sales Tax (E-SPLOST) referendum to offset costs associated with capital improvements. The E-SPLOST is a voter approved one percent sales tax on goods and services consumed within the sponsoring county or municipality. The tax can only be assessed if voter approval is secured by way of a referendum; the term of the tax is limited to no more than five years. School districts may use revenues generated by the E-SPLOST to pay for specific capital improvement projects for educational purposes, eliminate debt previously incurred as a result of capital outlay projects only, or to provide a sinking fund to repay a new General Obligation Bond for specified capital outlay improvements (Georgia Department of Education, 2011).

Prior to the E-SPLOST, districts usually acquired funding for capital projects through the issuance of general obligation bonds repaid primarily with property tax revenue. While the Georgia Department of Education's Rule 160-5-4-.04 affords some reimbursement of capital outlay costs through yearly rationing in accordance with a local district's five year facilities plan, local property taxes have been relied upon to fulfill the financial needs associated with capital outlay. Prior to the E-SPLOST the burden for providing funding to repay the bonds for capital expenditures fell exclusively on property owners.

Special purpose local option sales taxes such as the E-SLOST and general obligation bonds have been criticized as less than equitable since local property wealth and commercial activity vary amongst school districts. Seilke (2001) states that "reliance on local bond issues raises equity issues for students and taxpayers alike as bond issues are inextricably tied to property wealth" (p. 657). In fact, the Georgia Constitution prohibits school districts from incurring debt in excess of ten percent of the assessed value of all taxable property within the county or municipality (Georgia Constitution, Art. IX, §5, paragraph 1). Consequently, the amount of revenue available through bonded indebtedness to any district in Georgia is limited proportionally to the worth of the taxable property within their county or municipality.

Likewise, local consumption taxes such as the E-SPLOST have been criticized since revenues are linked to local retail activity which also varies across the state's school districts. Regarding such inter-district or inter-regional inequities associated with local sales taxes, Seilke (2001) adds that "the local sales tax has been criticized as being

inequitable because only those areas with a sizable retail base, mostly metropolitan suburban areas, can garner substantial sums of money” (p. 657).

In fiscal year (FY) 1995, prior to the advent of the E-SPLOST option, state expenditures for new construction, renovations to existing structures and for capital equipment in Georgia totaled approximately \$756 million; contrasted to approximately \$1.6 billion expended in FY 2005, eight years after the E-SPLOST was made available as a capital improvement funding mechanism for school districts (National Center for Education Statistics, 2011). In adjusted dollars, this represents a 39% increase.

Such a vast increase in statewide expenditures for capital outlay needs warranted investigation to determine if the E-SPLOST led to greater or less equity with regard to capital outlay expenditures across Georgia’s E-SPLOST participant school districts. Also of interest is whether any significant variance existed between mean differences in capital outlay expenditures prior to and after the emergence of the E-SPLOST according to the geographic location and socio-economic nature of the school district. The United States Census Bureau (2012) identified 33 counties as members of the Atlanta-Sandy Springs-Marietta Metropolitan Statistical Area (Atlanta MSA). Membership or non-membership in the Atlanta MSA was used to operationalize the geographic location of each school district as a variable. In addition to differences based on geographic location of school districts, the study explored the relative wealth of school districts as operationalized through assessed property wealth per student. School districts where per pupil property wealth fell at or below the 50<sup>th</sup> percentile were treated as one group, while districts where per pupil property wealth was at or above the 51<sup>st</sup> percentile were the second.

The study also examined whether money spent improving instructional classrooms, ancillary spaces such as cafeterias and auditoriums, or technology-related expenditures correlated with mean differences of student performance on the mathematics portion of the Scholastic Aptitude Test. Finally, it was of interest to determine if the perceptions of district superintendents, board of education chairpersons, and state-level legislators associated with school districts supported or were contrary to the findings of the equity and analysis of variance analyses of the study.

Accordingly, this study pursued the following questions with regard to the average adjusted expenditures for construction and improvement to school facilities and capital equipment for the four fiscal years prior to E-SPLOST – fiscal years 1994-1997, and for fiscal years 2005-2008. The following were the research questions and associated null hypotheses:

1. Have average adjusted yearly expenditures for capital outlay increased since the inception of the E-SPLOST?

H<sub>1</sub>: There is no increase in adjusted yearly expenditures for capital outlay since the inception of the E-SPLOST.

2. Since the inception of the E-SPLOST, have mean adjusted expenditures for capital outlay become more or less equitable among school districts that have participated in the E-SPLOST?

H<sub>2</sub>: There has been no change in the equity of adjusted yearly expenditures for capital outlay improvement projects among districts that have participated in the E-SPLOST.

3. Have changes in expenditures for capital outlay varied by the geographical location of the school district as operationalized by a district's membership or non-membership in the Atlanta MSA?

H<sub>3</sub>: Changes in expenditures for capital outlay have not varied by the geographical location of the school district.

4. Have changes in expenditures for capital outlay varied by the per pupil property wealth?

H<sub>4</sub>: Changes in expenditures for capital outlay have not varied by the per pupil property wealth.

5. Is change in expenditures for capital outlay improvement projects since the inception of the E-SPLOST related to change in student achievement, as operationalized through SAT mathematics scores?

H<sub>5</sub>: There is no relationship between expenditures for capital outlay improvement projects since the inception of the E-SPLOST and change in student achievement, as operationalized through SAT mathematics scores.

6. Are perceptions of district superintendents, board of education members and state legislators concerning the impact and potential of the E-SPLOST to provide adequate educational facilities related to geographic location or role?

H<sub>6</sub>: Perceptions of district superintendents, board of education members and state legislators concerning the impact and potential of E-SPLOST to provide adequate educational facilities are not related to geographic location or role.

7. Is student achievement related to the purposes to which post E-SPLOST capital expenditures have been applied (i.e. new or renovated classrooms,

ancillary spaces such as gymnasiums and cafeterias, or technology related enhancements)?

H<sub>7</sub>: There is no correlation between the nature of expenditures and student achievement on the mathematics portion of the Scholastic Aptitude Test.

8. What are the perspectives of superintendents, school board members, and state legislators regarding the conditions that will increase the E-SPLOST's capacity to address the capital outlay needs of school districts?

#### Participants in the Study

Participants for this study included superintendents and school board members associated with all 178 school districts in Georgia that collected and expended E-SPLOST revenue for capital outlay including new construction, improvements to existing facilities, or capital equipment between 1997 and 2008. As noted in the introductory chapter of the study, all but two of Georgia's school districts have utilized the E-SPLOST between 1997 and 2008. Student performance data, averaged for all students by year, from the mathematics portion of the Scholastic Aptitude Test (SAT) were collected for the 178 participant school districts. Lastly, perceptual data from the current superintendents and school board members of participating school districts were included.

Archival data, including expenditures for initial facility construction, improvements to existing structures, and capital equipment and the number of students enrolled for each of the 178 participant districts for fiscal years 1994 to 1997 and 2005 to 2008, the four most current years for which expenditure data were available, were utilized. Each of the 178 districts was recognized as a member or non-member of the

aforementioned Atlanta MSA as a part of the data analysis. In order to analyze student performance, the mean scores for the mathematics portion of the SAT from participant districts were recorded for the same groupings of years. To assess possible relationships between expenditure differences and the socio-economic status of students, demographic data regarding property wealth were used for the years specified as part of the study. Lastly, survey responses from current superintendents and school board members from the E-SPLOST participant districts were used to provide perceptual data relating to the impact the E-SPLOST has, and could potentially have on the equity and adequacy of school facilities and equipment. Collecting both quantitative and qualitative data related to the constructs of the study supported a two-phase analysis where initial findings in the quantitative phase were further explained by the qualitative data collected through the survey.

### Research Design and Procedures

This study was primarily conducted as a quantitative study, however qualitative data collected through an open-ended question was analyzed using methods associated with qualitative research (Cresswell, Plano Clark, Guttman, & Hanson, 2003). The analyses were conducted in two phases. Initially, quantitative data associated with E-SPLOST expenditures and student achievement were collected and analyzed to address the first five research questions of the study. Next, survey responses collected from the participants were used to address Research Questions 6 and 7. Responses from the open-ended question at the conclusion of the survey were used to address Research Question 8 and provide additional information to examine and explain findings from the quantitative data analysis. Using a two-phase approach was advantageous since more meaningful

conclusions could be reached as patterns and similarities across both phases of the study became evident (Ivankova, Creswell, & Stick, 2006). Consequently, this study was non-experimental in design since neither the expenditures nor the student performance data were manipulated by the researcher. Instead, archival data for categorized capital outlay expenditures, student performance data on the mathematics portion of the Scholastic Aptitude Test, and socio-economic data were retrieved through the National Center for Educational Statistics, the Georgia Governor's Office of Student Achievement, and the Georgia Department of Audits, respectively. Survey data were collected from current Georgia superintendents and board of education members from the 178 participant school districts and state legislators.

#### *Variables in the study*

The dependent variables included for each district (a) the average per pupil capital outlay expenditure for both time periods of the study for new construction, improvements to existing facilities, and instructional equipment, (b) the average mathematics SAT score for each participant school district for the post E-SPLOST years included in the study, and (c) the perceptions of superintendents and board of education members regarding the capacity and equity of the E-SPLOST. The independent variables were the geographic location of the school district and the socio-economic status of the district as represented by the assessed property wealth per pupil.

#### *Instrumentation*

Original and distinct instruments for superintendents, school board chairpersons and state legislators, entitled E-SPLOST survey, created by the researcher were used to capture data for this study. The surveys are attached as Appendices A, B, and C. The

survey instruments were utilized to collect perceptions from superintendents, school board chairpersons and state legislators associated with the school districts included in the study. The survey first asked superintendents to identify their school district by name. Superintendent respondents were assured that anonymity would be maintained and that the identification of their school district was only necessary to appropriately conduct the analysis for Research Question 7, results for which were reported in the aggregate, not by school district. Other respondents were asked to identify the school district with which they are associated not by name, but as a member or non-member of the Metropolitan Atlanta Statistical Area. The survey for superintendents was also unique in that it asked if the greatest amount of E-SPLOST dollars had been spent on classrooms, ancillary facilities such as cafeterias and auditoriums, or upgrades to technology-related equipment. This information allowed the researcher to correlate expenditures for each district by type to student achievement. All participants were asked to evaluate several statements on a five-point Likert scale with strongly disagree and strongly agree as the outermost ratings on the continuum. Finally, an open-ended question was included to solicit opinion data related to the final research question.

To strengthen validity and ensure that the instrument is appropriate for the purposes of this study, the questions on the survey were reviewed by experts in the field of school finance to include a Chief Financial Officer from a Georgia school district. Once the instrument was reviewed by the expert panel, and permission was granted by the Institutional Review Board (Appendix H), a pilot administration of the survey was conducted with former superintendents and school board members from Georgia. The purpose of the pilot administration was to assess the reliability of the survey instrument.

As posited by Tavakol and Dennick (2011) Chronbach's alpha should be calculated for each of the concepts contained within the survey rather than for the survey as a whole. Accordingly, the researcher grouped two sets of two survey items with each set representing two constructs of the study: (a) the impact or potential impact of the E-SPLOST to provide, and (b) the geographic influence on the potential of the E-SPLOST. Two items on the survey pertained to the impact or potential impact of the E-SPLOST to provide revenue for capital needs (items 1 and 2 on the superintendent and board member survey). There were two items that addressed geographic influence on the E-SPLOST (items 8 and 9 on the superintendent survey, and items 5 and 6 on the board member survey). Because item 9 on the superintendent survey and item 6 on the board member survey were worded negatively, responses to these questions were reverse coded for the Chronbach's alpha test.

A Chronbach's alpha test was used to assess the reliability of the survey items for these two constructs of the study. Generally an alpha value greater than .70 is desired; this was achieved for the impact of the E-SPLOST construct and the geographic location construct for the pilot phase and for the study as a whole. It is notable, however, that the number of questions for each construct was relatively small. Graham (2006) reminds that too small a number of items may violate assumptions associated with Chronbach's alpha and as a consequence underestimate reliability. Table 1 summarizes the results for both the pilot test and the eventual alpha value computed for the study as a whole.

Table 1

*Chronbach's Alpha for Pilot and Full Study*

Construct	Pilot	Full Study
Impact and potential impact of the E-SPLOST	.769	.950
Geographic location, economic conditions and equity of the E-SPLOST	.976	.765

The items included on the survey were associated with the different constructs of the study. The first prompt on the survey requested demographic data which were used to group respondents so that the responses to subsequent survey questions could be analyzed according to group and/or district membership. In the case of superintendents, the name of their district was requested while the other two participant group surveys asked only if respondents were affiliated or not affiliated with a county included in the Atlanta-Sandy Springs-Marietta Metropolitan Statistical Area. The initial survey items sought the opinion of respondents related to the utilization and adequacy of the E-SPLOST in providing school facilities and capital equipment. The two items that followed asked whether the geographic location of the school district positively or negatively impact the capacity of the E-SPLOST to provide for the capital outlay needs of students. The next two items asked respondents to consider the impact the assessed local property wealth has on the E-SPLOST and its capacity to fund the capital outlay needs of the district. The next two items evaluated on the scale were aimed at evaluating the perceived impact of the school facility on student achievement. The next-to-the-last

item asked respondents to rate the capacity of the E-SPLOST to provide funds to build, maintain, and equip educational facilities. Lastly, an open-ended item prompted all participants to describe what conditions would increase the E-SPLOST's capacity to address capital outlay needs in their respective district.

#### *Data collection process*

The National Center for Educational Statistics hosts district-level data for capital outlay within three distinct categories: 1) capital outlay for new construction and land acquisition, 2) capital outlay for improvements to existing facilities, and 3) capital outlay for instructional equipment. District-level expenditures for each fiscal year for each of the three capital outlay expenditure categories (new construction, improvements to existing structures, and instructional equipment) across multiple years were equalized to 2008 value using the Federal Consumer Price Index. Next, each district's total capital outlay expenditures and expenditures for each category (initial construction, improvements to existing facilities, and capital equipment) per fiscal year were divided by the number of students enrolled for the corresponding year. This resulted in an average yearly expenditure amount per pupil for each of the three categories of capital outlay, as well as an aggregate per student expenditure. Because capital outlay projects and associated expenses often are distributed across multiple fiscal years, a single average per pupil expenditure representing each four-year time period was calculated and used to conduct the statistical analysis.

Once approval from the IRB at the University of Southern Mississippi was obtained (Appendix H), surveys were offered electronically by e-mail to the superintendent, school board chairpersons, and state-level legislators associated with all

178 school districts. A cover letter explaining the purpose of the study, along with related benefits and risks of participation, and voluntary nature of participation was included with the instrument. Participant consent to participate was inferred from his/her return of the completed instrument. The cover letters are included as Appendix D and Appendix F.

In addition to the initial demographic questions which were used to facilitate grouping, the survey instrument contained items related to four aspects of the E-SPLOST: (a) the adequacy of the E-SPLOST as a revenue source for providing and maintaining adequate educational facilities and equipment, (b) any perceived impact the geographic location of the district within the state has on the capacity of an E-SPLOST to provide adequate funding, (c) perceived impact of local property wealth on the E-SPLOST's capacity to provide adequate funding, (d) perceived impact of quality educational facilities on student achievement. Lastly, an open-ended question was used to collect the opinions of respondents as to what conditions will increase the E-SPLOST's capacity to address future capital outlay needs.

#### Analysis of the Results

For participant school district, actual expenditures for each category of capital outlay (initial construction, improvements to existing structures, and capital equipment) were recorded for each of the two time periods included in the study. The use of four consecutive years of data to determine an average per pupil expenditure amount for each time period was intentional since expenditures associated with capital outlay often extend across multiple fiscal years. Next, the Federal Consumer Price Index inflation calculator was used to equalize all expenditure dollar amounts included in the study to 2008 value,

the last year included in the study. Summing all expenditures by category for each district and each time period provided the average per pupil expenditure to be used as the numerator in determining a per pupil amount. Next, student enrollment data were recorded for each district for the years included in the study. The average student enrollment during each time period provided the denominator for the per pupil average expenditure.

Basic descriptive statistics, including means, medians, standard deviations, and state percentile rank, were computed for each district's per pupil capital outlay expenditures per category (new construction, improvement to existing structures, and capital equipment) from 1994 to 1997 and then again for 2005 to 2008. Such statistics were useful in providing a general idea as to discrepancies across school districts; however, more complex statistics were used to examine horizontal equity between participant school districts. Descriptive statistics were also computed for the survey questions utilized in the study.

In order to address Research Question 1, concerning differences in average adjusted yearly expenditures for capital outlay following the inception of the E-SPLOST, a repeated measures ANOVA was conducted with period (the per pupil expenditure before and after the implementation of the E-SPLOST) as the repeated measures variable. To address Research Question 2, concerning the horizontal equity of expenditures among districts, three statistics were calculated using the per pupil expenditures for each time period: (a) the coefficient of variation, (b) the McLoone Index, and (c) the Verstegen Index. The coefficient of variation included all values in the data set and indicated the percentage of variation about the mean of the distribution. The McLoone Index focused

on differences in the data set below the median, while the Verstegen Index examined differences above the median. As Odden and Piccus (2004) advocate:

A careful analyst would calculate all three statistics – the CV, the McLoone, and the Verstegen – and determine whether overall disparities have improved (a lower CV), whether differences below the median have improved (a higher McLoone), and whether differences in the top half have improved (a lower Verstegen) (p. 70).

To address Research Question 3 regarding whether changes in expenditures for capital outlay varied by the geographical location of the school district, districts were grouped by their location (rural versus urban areas) and a mixed model ANOVA was conducted with location as the grouping variable and period as the repeated measures variables. To address Research Question 4, concerning the changes in expenditures for capital outlay that vary by the assessed property wealth per pupil, property wealth per pupil was divided into three groups (lowest 33%, middle 33%, and greatest 33%) and entered as a grouping variable into a mixed model ANOVA with period as the repeated measures variables.

To address Research Question 5, regarding whether changes in expenditures for capital outlay improvement projects since the inception of the E-SPLOST were related to changes in student achievement, as operationalized through SAT mathematics scores, a Pearson product-moment coefficient was used to illustrate correlations between expenditures in each of the three categories (new construction, equipment, land and improvements to existing facilities) with SAT mathematics scores.

To address Research Question 6, whether perceptions of district superintendents, board of education members and state legislators concerning the impact and potential of E-SPLOST to provide adequate educational facilities vary according to role or geographic location, a mixed model ANOVA was conducted. Responses to survey items 1 and 2 for Board Members and Superintendents were amassed into subscale means for each respondent group. The geographic location (rural, urban) and participant group (superintendent, board of education member) were used as grouping variables.

To address Research Question 7, a two-way ANOVA was utilized to determine differences in average mathematics SAT achievement from 2005-2008 in relation to the primary use of E-SPLOST proceeds and grade span as represented across items 5, 6, and 7 of the Superintendent Survey. For this analysis, the primary use of E-SPLOST proceeds and grade-span served as the independent variables to determine differences in the average mathematics SAT achievement, the dependent variable.

To address Research Question 8, responses from the survey's open-ended item were analyzed using thematic analysis (Aronson, 1994; Braun & Clarke, 2006). By establishing categories and ultimately themes through axial coding (Creswell, 2003), participants' responses yielded a better understanding of the conditions necessary to increase the E-SPLOST's capacity to address the capital outlay needs of Georgia school districts. Further, thematic patterns that emerged helped thicken possible explanations for findings associated with the quantitative aspect of the study.

### Summary

In 1996, Georgia's lawmakers provided local counties and municipalities the authority to collect and expend the E-SPLOST to support the capital outlay needs of school districts throughout the state. As a consumption tax, the amount of revenue

generated, and consequently the amount available for use, is tied to spending within the geographic boundaries of the host county. This study was designed to determine if the E-SPLOST has benefitted school districts throughout the state of Georgia equitably.

District-level board members and superintendents have an obvious interest in utilizing the E-SPLOST to provide properly-equipped and well-maintained facilities for their students. State legislators, while elected locally or regionally, understand that an adequate education is guaranteed by the Georgia Constitution regardless of a student's county of residence. Given that the E-SPLOST is intended to provide and equip educational facilities for all of Georgia's students, any variance in the capacity of the tax to provide for capital outlay should be clearly understood to determine any corresponding impact on equity.

To pursue answers to the study's research questions, basic descriptive statistics, correlational statistics and a mixed model ANOVA with repeated measures were used to provide initial answers concerning the variance associated with capital outlay expenditures across all 178 districts included in the study. In addition grouping variables associated with geographic location and the relative wealth of the district were introduced as independent variables to explore possible interactions in order to better explain any variance discovered. Three additional statistics including: (a) the coefficient of variation, (b) the McLoone Index, and (c) the Verstegen Index were calculated to reveal disparities between the districts included in the study and their corresponding expenditures for capital outlay.

Finally, the study allowed for the perceptual data and quantitative findings to converge through the constructed responses of participants. Specifically, how do

variances in spending or use be better understood and do perceptions centralize around a particular theme depending on the position or locale of the respondent? Themes drawn from the qualitative analysis allowed for a more robust understanding of phenomena discovered as a result of the quantitative analysis. Jick (1979) posits that the use of multiple measures can lead to the realization of additional variance that might otherwise remain undiscovered.

## CHAPTER IV

### RESULTS

The primary purpose of this study was to determine whether per pupil capital outlay expenditures associated with new construction, renovation, or technology enhancements for school divisions in Georgia have significantly increased since the inception of the Education Special Purpose Local Option Sales Tax (E-SPLOST). Further, if significant differences existed, the researcher also desired to determine how such differences varied in relation to geographic location, per pupil property wealth and students' math scores on the Scholastic Aptitude Test (SAT).

Lastly, superintendents, school board chairpersons and state legislators were surveyed to determine whether opinions associated with the usefulness of the E-SPLOST existed and whether such differences varied by the respondent's geographic location. An open-ended question asking which conditions will impact the E-SPLOST's capacity to provide for the capital outlay needs of their district was used to solicit commentary from survey takers. Responses were analyzed to determine if themes within and across response groups existed and if such themes supported or dissented from the quantitative findings of the study.

#### Description of Participants

The study utilized archival data associated with 178 school districts in Georgia. This included all school districts that have utilized the E-SPLOST as a source of funding for capital expenditures. Annual expenditure amounts for capital outlay across three categories (new construction, instructional equipment, and land acquisition and renovation of existing facilities) were collected from the National Center for Educational

Statistics for the eight years included in the study. In addition, the adjusted property tax digests for each school district as reported by the Georgia Department of Audits and Accounts, and the pupil enrollment for each school district were gathered for each year included in the study. Every school division's tax digest was then divided by the student enrollment for each year included in the study. This resulted in eight years of per pupil property wealth figures for each school district, four for the early period (1994-1997) and four for the late period (2005-2008). Each set of four per pupil property wealth amounts was then averaged to create one amount for the early part of the study and one amount for the later years included in the study. The resulting per pupil property wealth figures were then ranked and divided into three groups: low (60 districts), moderate (59 districts) and high (59 districts) for the purposes of the analyses. Of the 178 school districts, 40 are members of the Atlanta MSA and 138 are not. Mathematics SAT scores were available for 167 of the 178 school districts included in the study. Descriptive statistics, overall and for each subgroup, regarding capital outlay expenditures and mathematics SAT scores are displayed in Table 2.

Table 2

*Descriptive Statistics For Per Pupil Capital Outlay Expenditures and SAT Scores*

Variable	<u>Pre E-SPLOST</u>			<u>Post E-SPLOST</u>		
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>
<b>New Construction</b>						
All Cases	178	639.31	1112.37	178	847.14	906.47
Member	40	620.02	951.23	40	858.68	775.18
Non-member	138	658.61	747.67	138	835.61	609.36
Property Wealth High	59	822.23	739.62	59	1085.32	602.74
Property Wealth Moderate	59	658.02	1016.52	59	824.48	828.33
Property Wealth Low	60	437.68	1465.15	60	631.63	1193.96
<b>Equipment</b>						
All Cases	178	117.70	91.51	178	25.13	43.92
Member	40	107.27	78.29	40	23.54	37.54
Non-member	138	128.12	61.53	138	26.72	29.58
Property Wealth High	59	126.67	60.83	59	35.98	29.27
Property Wealth Moderate	59	114.08	83.65	59	19.73	40.10
Property Wealth Low	60	112.35	120.53	60	19.69	57.86
<b>Improvements to Existing Facilities/Acquisition of New Land</b>						
All Cases	178	28.75	68.23	178	42.30	99.58
Member	40	37.48	78.29	40	49.73	37.54
Non-member	138	20.02	61.53	138	34.87	29.58
Property Wealth High	59	43.17	75.59	59	75.59	66.21
Property Wealth Moderate	59	25.25	62.37	59	28.89	91.02
Property Wealth Low	60	17.84	89.85	60	22.42	131.14
<b>Mathematics SAT Scores</b>						
All Cases	-	-	-	167	471.31	30.64
Member	-	-	-	40	484.00	28.83
Non-Members	-	-	-	127	467.74	30.24

Note. All mean expenditures are shown in 2008 value (dollars). Dashes used to indicate that the availability of mathematics SAT scores was limited to the 2004-2008 time period of the study.

Survey invitations were sent three times electronically to 178 school superintendents, 178 school board chairpersons, and to all 180 state representatives in the General Assembly of Georgia. Superintendents from 23 Georgia school districts, school board members from nine Georgia districts, and three state legislators returned surveys. The overall response rate to the survey was 6% with a 13% response rate from superintendents, a 5% response rate from school board members, and a 2% response rate from state legislators. Of the 23 superintendents who returned surveys, eight (32%) serve in school divisions within the Atlanta-Sandy Springs-Marietta Metropolitan Statistical Area (Atlanta MSA). School board members from nine school divisions returned surveys with ten (83.3%) serving school divisions within the Atlanta MSA. Only three state representatives returned surveys; two of them represented school divisions within the Atlanta MSA and one outside of the Atlanta MSA.

Table 3

*Survey Descriptive Statistics*

Survey Question	Respondent Group	<i>N</i>	<i>M</i>	<i>SD</i>
The E-SPLOST has served as the primary funding source to build or renovate educational facilities.	Superintendent	23	1.39	.89
	School Board	9	1.34	.79
The E-SPLOST has allowed our school district to make improvement to our facilities that otherwise would not have been made.	Superintendent	22	1.27	.88
	School Board	9	1.23	.76

Table 3 (continued).

Survey Question	Respondent Group	<i>N</i>	<i>M</i>	<i>SD</i>
I believe the geographic location of my school district negatively impacts E-SPLOST proceeds used to improve school facilities and equipment in my district.	Superintendent	23	2.87	1.36
	School Board	9	3.09	1.44
I believe the geographic location of my school district positively impacts E-SPLOST proceeds used to improve school facilities and equipment in my district.	Superintendent	23	3.13	1.49
	School Board	9	2.88	1.50

### Results

Research Question 1 read as follows: Have average adjusted yearly expenditures for capital outlay increased since the inception of the E-SPLOST? In order to address this question, a repeated measures ANOVA was conducted with period (the per pupil expenditure averaged across four years before and after the implementation of the E-SPLOST) as the repeated measures variable. As represented in Table 4, no significant differences in expenditures were evident for new construction  $F(1,172 \text{ df}) = 3.36, p = .069$  or the acquisition of land and improvements to existing facilities  $F(1,172 \text{ df}) = 2.99, p = .085$ . Differences in expenditures for equipment were significant  $F(1,172 \text{ df}) = 165.53, p = < .001$ , indicating a reduction in post E-SPLOST expenditures.

Table 4

*Overall Differences in Per Pupil Capital Outlay Expenditures*

	<u>Pre E-SPLOST</u>		<u>Post E-SPLOST</u>		<i>F</i>	<i>df</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
New Construction	639.31	1112.37	847.14	906.47	3.36	1,172
Equipment	117.70	91.51	25.13	43.92	165.53*	1,172
Land and Improvements to Existing Facilities	28.75	68.23	42.30	99.58	2.99	1,172

Note. \*p < .01

Research Question 2 read as follows: Since the inception of the E-SPLOST, have mean adjusted expenditures for capital outlay become more or less equitable among school districts that have participated in the E-SPLOST? To address this question, three statistics were used. The coefficient of variation (CV) was calculated to reveal the overall variation between expenditures for each category between the two time periods of the study. Except for expenditures prior to the E-SPLOST for equipment, the CV in all cases exceeded 1.0 confirming that generally per pupil expenditure amounts are widely distributed. Next, the McLoone Index was calculated to show the degree of equality for expenditures below the 50<sup>th</sup> percentile. The value of the McLoone index ranges from 0 to 1 with a value of 1 representing perfect equality. The results of the McLoone analysis indicated that expenditures for new construction and the acquisition of new land or

improvements to existing structures became more equitable after implementation of the E-SPLOST (.44 to .55 and .18 to .24 respectively). Conversely, expenditures for equipment became less equitable after the E-SPLOST (.80 to .42)

Lastly, the Verstegen Index was calculated to explore the degree of equality for expenditures above the 50<sup>th</sup> percentile. The Verstegen Index is always represented as a value greater than 1 that increases as disparity increases. The results of the Verstegen analysis indicate that expenditures for new construction and improvements to existing facilities became more equitable after the implementation of the E-SPLOST (2.47 to 1.71 and 9.89 and 6.42 respectively). Expenditures for equipment became more inequitable after the implementation of the E-SPLOST (1.57 to 2.33). The results of all three analyses are included in Table 5.

Table 5

*Horizontal Equity of Per Pupil Capital Outlay Expenditures*

	<u>Pre E-SPLOST</u>			<u>Post E-SPLOST</u>		
	CV	McLoone	Verstegen	CV	McLoone	Verstegen
New Construction	1.74	.44	2.47	1.07	.55	1.71
Equipment	.78	.80	1.57	1.75	.42	2.33
Land and Improvements to Existing Facilities	2.37	.18	9.89	2.35	.24	6.42

Note. CV = Coefficient of Variation

Research Question 3 read as follows: Have changes in expenditures for capital outlay varied by the geographical location of the school district as operationalized by a district's membership or non-membership in the Atlanta MSA? To address this research question, districts were grouped by their location (rural versus urban areas) and a mixed model ANOVA was conducted with location as the grouping variable and expenditures across the two periods, and four years within each period as the repeated measures variables. As can be seen in Table 6, there were no location by period interactions on any of the capital outlay variables.

Table 6

*Geographic Differences in Per Pupil Capital Outlay Expenditures*

		Metro Atlanta Statistical Area	<u>Pre E-SPLOST</u>		<u>Post E-SPLOST</u>		<i>F</i>	<i>df</i>
			<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
New Construction	Member	620.02	951.23	858.68	775.18	.074	1,172	
	Non-Member	658.61	747.67	835.61	609.36			
Equipment	Member	107.27	78.29	23.54	37.54	1.51	1,172	
	Non-Member	128.12	61.53	26.72	29.58			
Land and Improvements to Existing Facilities	Member	37.48	78.29	49.73	37.54	.028	1,172	
	Non-Member	20.02	61.53	34.87	29.58			

Research Question 4 read as follows: Have changes in expenditures for capital outlay varied by the per pupil property wealth? To address this research question, the average per pupil property wealth amounts were determined and divided into three

groups (low 33%, moderate 33%, and high 33%) and entered as a grouping variable into a mixed model ANOVA with location as the grouping variable and expenditures across the two periods, and four years within each period as the repeated measures variables. The early time period of the study was used to divide the school divisions into thirds for comparison purposes since the early years serve as a natural baseline against which the later years were compared. As can be seen in Table 7, there were no per pupil property wealth group by period interactions.

Table 7

*Per Pupil Property Wealth Differences in Capital Outlay Expenditures*

		Per Pupil Property Wealth	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>df</i>
New Construction	Low	437.68	1465.15	631.63	1193.96	.102	2,172	
	Moderate	658.02	1016.52	824.48	828.33			
	High	822.23	739.62	1085.32	602.74			
Instructional Equipment	Low	112.35	120.53	19.69	57.86	.035	2,172	
	Moderate	114.08	83.65	19.73	40.10			
	High	126.67	60.83	35.98	29.27			
Land and Improvements to Facilities	Low	17.84	89.85	22.42	131.14	2.19	2,172	
	Moderate	25.25	62.37	28.89	91.02			
	High	43.17	45.40	75.59	66.21			

Research Question 5 read as follows: Is change in expenditures for capital outlay improvement projects since the inception of the E-SPLOST related to change in student achievement, as operationalized through SAT mathematics scores? To address this research question, a Pearson product-moment coefficient was determined to illustrate correlations between expenditures in each of the three categories (new construction,

equipment, land and improvements to existing facilities) with SAT mathematics scores. Results of the analyses for H<sub>5</sub> showed a significant, albeit small, correlation between math SAT score gains and expenditures for new construction, along with land and improvements to existing structures,  $r = .193$ ,  $p = .012$ , and  $r = .179$ ,  $p = .020$  respectively. There was a nonsignificant correlation between SAT mathematics scores and expenditures for instructional equipment. The results of the correlations are displayed in Table 8.

Table 8

*Correlations of Post E-SPLOST Expenditures with Math SAT Scores*

	<i>N</i>	<i>r</i>	<i>p</i>
New Construction	167	.193	.012
Equipment	167	-.077	.322
Land and Improvements to Existing Facilities	167	.179	.020

Research Question 6 read as follows: Are perceptions of district superintendents, board of education members and state legislators concerning the impact and potential of E-SPLOST to provide adequate educational facilities related to geographic location or role (superintendent or board member) of the survey participant? Unfortunately only three legislators responded to the survey invitation. Accordingly, the analysis was adjusted to include superintendents and school board members only. To address this question, a two-way ANOVA was conducted. Responses to survey questions 1 and 2 for board members and superintendents were averaged for the analysis. The geographic

location (rural, urban) and participant group (superintendent, board member) were used as grouping variables. The two-way ANOVA revealed no main effects of respondent group,  $F(1,28) = .001, p = .98$ , or geographic location,  $F(1,28) = .948, p = .34$ , or any interaction of those variables,  $F(1,28) = .054, p = .82$ . Table 9 contains the results of the analysis.

Table 9

*Perceptions of School Board Members and Superintendents*

Role	Respondent Group	<i>N</i>	<i>M</i>	<i>SD</i>
Superintendents	Member	7	1.14	.38
	Non-Member	16	1.40	1.00
School Board Members	Member	7	1.07	.19
	Non-Member	2	1.50	.70

Research Question 7 read as follows: Is student achievement related to the purposes to which post E-SPLOST capital expenditures have been applied (i.e., new or renovated classrooms, ancillary spaces such as gymnasiums and cafeterias, or technology related enhancements)? To address this research question, a two-way ANOVA was utilized to determine differences in average mathematics SAT achievement from 2005-2008 as a function of location (rural, urban) and the particular use of funds (new construction, instructional equipment, improvement of existing facilities or purchase of new land) as indicated by responses to items 5, 6, and 7 of the Superintendent Survey. Results indicated no main effect of location,  $F(1,16) = .36, p = .56$ , or fund use,  $F(2,16) =$

1.17,  $p = .34$ , or any interaction of those variables,  $F(1,2) = .17$ ,  $p = .85$ . Table 10 contains the results of this analysis.

Table 10

*Math SAT Achievement and Use of E-SPLOST*

Location	Purpose of Expenditure	<i>N</i>	<i>M</i>	<i>SD</i>
Member	Add or renovate instructional space	3	468.67	24.11
	Add or renovate ancillary facilities	3	476.00	15.10
	Add or upgrade technology	1	507.00	0.00
	Add or renovate instructional space	9	469.22	30.24
Non-Member	Add or renovate ancillary facilities	4	471.00	20.31
	Add or upgrade technology	2	486.50	28.99

Research Question 8 read as follows: What are the perspectives of superintendents, school board members, and state legislators regarding the conditions that will increase the E-SPLOST's capacity to address the capital outlay needs of school districts? To address Research Question 8, survey responses from each survey's open-ended item were analyzed using thematic analysis (Aronson, 1994; Braun & Clarke, 2006). The open-ended question asked participants about conditions that will increase

the E-SPLOST's capacity to address the capital outlay needs of their school districts. By establishing categories and, ultimately, themes through axial coding (Creswell, 2003), participants' responses yielded a better understanding of the conditions necessary to increase the E-SPLOST's capacity to address the capital outlay needs of Georgia school districts. Further, thematic patterns that emerged were used to posit possible explanations for findings associated with the quantitative aspect of the study.

All responses to the open-ended item were reviewed and, as needed, diffused into categories for the purpose of the coding. Consequently, 56 comments were distilled into ten categories. From these categories, three predominant themes emerged: 1) the impact of increased commerce and consumer spending on the E-SPLOST, 2) community understanding of the E-SPLOST, and 3) perceived factors associated with disparity of the E-SPLOST. Table 11 indicates the number of comments associated with the three predominant themes organized by the role of the respondent.

Table 11

*Superintendent and Board Member Perceptions – Capacity of the E-SPLOST*

Theme	Superintendent Responses	Board Member Responses	Total Responses
Increased commerce and consumer spending	22	4	26
Community understanding	2	3	5

Table 11 (continued).

Theme	Superintendent Responses	Board Member Responses	Total Responses
Perceived factors of disparity and the E-SPLOST	5	4	9
Total Responses	29	11	40

The first theme, increased commerce and consumer spending, was supported by 26 comments, 22 of which were from superintendents. Eight superintendents alluded to the timeliness and strength of the current economic recovery as a dominant factor. One superintendent confirmed that E-SPLOST “proceeds are directly related to the health of the economy.” In addition to conditions within the existing local economy, 12 superintendents posited that increased retail development and industry are important to the capacity of the E-SPLOST. Responses such as “additional economic development for our county will enhance the E-SPLOST collection amounts” and “the current projected economic growth from the film industry new to the county should greatly increase our funds available” were among those offered. Three school board members echoed the sentiments of the superintendents that a strong economy is an influential antecedent for better capacity of the E-SPLOST. Two board members referenced the need for a stronger economy to generate better proceeds. Another board member remarked from a historical perspective stating “as the economy changed, it hurt our E-SPLOST and our building program.” Interestingly, only one board member mentioned expansion of local business

as having the potential to impact the E-SPLOST. The respondent stated “since the E-SPLOST is tied to sales tax, an increase in retail businesses in our community has increased collections.”

The second theme, community understanding, was supported by two superintendent responses and three from board members. One superintendent deemed it important that “residents (have an) understanding of what capital needs actually are,” while a second superintendent stated that a “better understanding of (the) E-SPLOST usage by non-users of public education services” could prove important to the future capacity of the tax. Likewise board members offered responses regarding the importance of the public understanding the purpose of the E-SPLOST. One board member stated that “the public perception of the E-SPLOST is that it should be for school buildings only. So, if a district needs other infrastructure like improved athletic facilities or central office facilities, many taxpayers don’t view those as worthy expenditures.” Another board member addressed the importance of public understanding as a precursor to trust and the continuation of the E-SPLOST – “continued understanding by taxpayers and building trust between the board, the district and community. The more the board is trusted, the more likely the (E-SPLOST) referendum will pass.”

The final theme, perceived factors of disparity and the E-SPLOST elicited five comments from five superintendents and four board members. The majority of comments offered by both superintendents and board members referenced differences in geography, socio-economic makeup, and density of retail businesses as important variables in the ability of the E-SPLOST to meet capital needs. One superintendent lamented “we currently collect \$65K a month while most of our neighboring school

districts collect \$150K or more. This disparity allows those districts to pay off bond debt, or never incur it, as well as build, update, or support technology at levels our county can only dream about.” Another superintendent noted that “we are not geographically located to utilize off-ramps from major interstates or highways” as another potential factor affecting revenue generated by the E-SPLOST. A third superintendent surmised that “regional retail centers have a much greater advantage in raising E-SPLOST dollars.” Adding to the perceived disparity, one board member offered that “some counties have more than they can spend but others struggle mightily due to their local economy.” Disparities in retail density were also referenced by one board member who noted that his district benefits because “folks from surrounding counties come to our county to spend money.”

#### Summary

The primary purpose of this study was to determine whether per pupil capital outlay expenditures associated with new construction, renovation, or instructional equipment for school divisions in Georgia have significantly increased since the inception of the Education Special Purpose Local Option Sales Tax (E-SPLOST). In addition, the researcher desired to determine how such differences varied in relation to geographic location, per pupil property wealth and students’ math scores on the Scholastic Aptitude Test (SAT). Also of interest was to gauge the perceptions of superintendents, school board chairpersons and state legislators regarding the usefulness and capacity of the E-SPLOST to meet the capital needs of their school districts.

Data concerning capital expenditures and mathematics SAT scores were obtained from the National Center for Educational Statistics and the Georgia Governor’s Office of

Student Achievement respectively. Property tax digests for the years included in the study were obtained from the Georgia Department of Audits. An original survey instrument was used to capture opinion data in order to complete statistical analyses associated with each research question.

The data indicated that differences in per pupil expenditures for instructional equipment were significant, revealing a reduction post E-SPLOST. Further, expenditures for new construction and improvements to existing educational facilities or to acquire new land have become more equitable since the inception of the E-SPLOST. Expenditures for instructional equipment however have become less equitable. Perception data gathered from superintendents and school board members as to how the E-SPLOST could better meet capital outlay needs were found to support three themes: 1) increased commerce and consumer spending, 2) community understanding of the E-SPLOST, and 3) possible sources of disparity. Chapter V provides discussion in relation to these findings.

## CHAPTER V

### DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS

The purpose of this study was to determine if per pupil capital outlay expenditures have increased significantly and to determine if expenditures since the inception of the E-SPLOST have become more or less equitable. The study also explored whether differences in expenditures between school districts varied as a function of location or per pupil property wealth. An additional aspect of the study was to explore whether specific uses of E-SPLOST proceeds related to changes in student achievement on mathematics SAT scores. Lastly, it was of interest to gauge the perceptions of district superintendents, board members and state legislators regarding the adequacy of the E-SPLOST to meet capital outlay needs. Chapter V presents a summary of the procedures and findings, a discussion of the results, and recommendations for policy, practice, and future research.

#### Summary of Procedures

The archival data for the study were gathered from the National Center for Educational Statistics, the Georgia Department of Audits and Accounts, The Governor's Office of Student Achievement for Georgia, and the Georgia Department of Education. Additional data were collected from state legislators, school board members and school district superintendents; however, only two responses were offered by state legislators. This prompted the researcher to exclude this group from the study. Once the survey instruments were developed for each respondent group, they were reviewed by an expert panel.

Approval was sought from and granted by the University of Southern Mississippi's Institutional Review Board (IRB). The IRB approval letter is attached as

Appendix H. A pilot administration of the survey was conducted to determine the reliability of the instrument. Responses associated with constructs included in the study were analyzed using Chronbach's alpha test of coefficient reliability. The test resulted in an alpha value greater than .900 for the pilot and ultimately for the full study as well. The instrument was sent electronically to all participants on three separate occasions over a three week period. Archival and participant survey data were entered into a Microsoft Excel workbook to be analyzed.

The study was primarily conducted as a quantitative study, however qualitative data collected through an open-ended question was analyzed using methods associated with qualitative research (Cresswell et al., 2003). Data were compiled and analyzed by the researcher. Quantitative data were analyzed using descriptive statistics, the coefficient of variation, the McLoone Index, the Verstegen Index, a Pearson product-moment correlation, and a two-way ANOVA. To analyze the responses to the constructed-response item for the qualitative element of the study, the researcher initially burst the data across ten categories using Grounded Theory techniques. From these categories, three themes were distilled for use in the analysis.

### Major Findings

The quantitative data collected for this study yielded interesting insights; the responses from the open-ended question of the survey instrument were also useful. The findings indicated that the per pupil capital outlay expenditures for both time periods of the study were heavily concentrated for new construction. Prior to the E-SPLOST, per pupil expenditures for all districts related to new construction averaged \$639.31 compared to \$847.14 after the inception of the E-SPLOST. The expenditure category

with the next highest per pupil expenditure was \$117.20 for instructional equipment prior to the E-SPLOST; spending in this category dropped in the subsequent time period to \$25.13 per student. No other per pupil expenditure exceeded \$50.00 for any of the other categories during either time period. Because per pupil expenditures were equalized to 2008 value, the increase in the per pupil construction amount from \$639.31 prior to E-SPLOST to \$847.14 after the implementation of E-SPLOST was notable. Also of interest was that prior to the E-SPLOST, school districts that were considered rural (non-members of the Atlanta Sandy Springs Metropolitan Statistical Area), afforded a higher per pupil cost for new construction than their urban counterparts (rural = \$658.61; urban = \$620.02). This relationship reversed after the inception of the E-SPLOST with urban districts expending more per pupil for new construction than rural districts (rural = \$835.61; urban = \$858.68).

Findings associated with the hypotheses proved interesting as well. Research Question 1 sought to determine if adjusted expenditures for capital outlay increased since the inception of the E-SPLOST. The analysis for the associated hypothesis ( $H_1$ ), revealed no statistically significant increases for any of the categories of expenditure. However, the drop in per pupil expenditure for instructional equipment was statistically significant.

Research Question 2 inquired as to whether mean adjusted expenditures for capital outlay become more or less equitable among school districts that have participated in the E-SPLOST. For the related hypothesis ( $H_2$ ), three statistics were employed: 1) the coefficient of variation, 2) the McLoone Index, and 3) the Verstegen Index. The coefficient of variation allowed the researcher to infer that expenditures per pupil varied widely since a value greater than 1.00 was computed for every category and for both time

periods with the exception of pre E-SPLOST expenditures for instructional equipment (.78). Such variability was anticipated since capital outlay expenditures, by nature, are less regular than other types of operating expenditures for school districts. As for equity, it was notable that for both the top half and bottom half of the distribution, expenditures for new construction and for the renovation of existing facilities or the acquisition of new land became more equitable after the inception of the E-SPLOST.

Research Questions 3 and 4 asked whether changes in expenditures varied by geographic location or per pupil assessed property tax respectively. Both analyses conducted for the related hypotheses ( $H_3$  and  $H_4$ ) supported the null hypotheses. This was somewhat surprising since the data related to geographic location indicated that average per pupil expenditures for new construction increased \$238.66 for urban districts but only \$177.00 for rural districts. As for per pupil property wealth, expenditures were ranked and divided into three categories: low, moderate and high. For the lowest third, expenditures increased by \$193.95, the moderate third rose \$166.45, and the high third advanced to \$263.09.

Research Questions 5 and 7 asked respectively whether student achievement is related to changes in per pupil expenditures for capital outlay or related to the purposes to which capital expenditures were applied after the inception of the E-SPLOST. Results of the analyses for  $H_5$  showed a significant, albeit small, correlation between math SAT score and expenditures for new construction, along with land and improvements to existing structures,  $r = .193$ ,  $p = .012$ , and  $r = .179$ ,  $p = .020$  respectively. There was a nonsignificant correlation between SAT mathematics scores and expenditures for instructional equipment. The analysis for  $H_7$  showed no significant correlation between

SAT scores and the purpose to which E-SPLOST proceeds were applied. However, the data collected for the analysis mirrored the archival expenditure data, with 19 of 23 superintendents reporting that E-SPLOST proceeds had primarily been used to add or renovate instructional or ancillary spaces. Only three superintendents indicated that E-SPLOST proceeds had been used to add or upgrade equipment related to technology.

Research Question 6 asked about the perceptions of superintendents, board members or state legislators concerning the impact and potential of the E-SPLOST to meet needs varied by their role or geographic location. The related analysis for  $H_6$  revealed no main effect with regard to role or geographic location. While not statistically significant, the data did reveal a trend that indicated that regardless of the respondents' role (superintendent or board member), those from urban districts rated the E-SPLOST's impact higher than their rural counterparts (Table 8).

The qualitative data collected were of additional interest. Research Question 8 prompted exploration of the perspectives of superintendents, school board members, and state legislators regarding the conditions that will increase the E-SPLOST's capacity to address capital outlay related needs of school districts. Too few state legislators responded to the survey to be included; however, responses from superintendents and school board members were clustered around three primary themes: increased commerce and consumer spending, community understanding of the E-SPLOST, and perceived factors associated with disparity of the E-SPLOST.

Regarding increased commerce and consumer spending, respondents indicated that stronger consumer spending leading to a more robust local economy will be key to the E-SPLOST's capacity in the future. One respondent noted that the economic

downturn dampened E-SPLOST proceeds which delayed the school district's planning for new buildings. As far as community understanding of the E-SPLOST, both superintendent and board member remarks conveyed that voter understanding and perception of the E-SPLOST was key if the tax is to remain. Superintendents focused on the operational aspect, highlighting a need to contrast capital outlay with annual operating expenses. Board members stressed the importance of developing trust with the community and demonstrating efficient use of the E-SPLOST as important antecedents to voter approval of future E-SPLOST referenda.

#### Discussion

Several of the findings associated with this study are consistent with prior research. Evident in many of the analyses of this study were the increases in per pupil expenditures for new construction, land, and/or improvements to existing facilities. This is consistent with the conclusions of Sielke (2001), who found that funding for school infrastructure in Georgia increased from \$15.6 million in 1994 to nearly \$190.3 million in 1999 and Jung (2000) who found that utilization of local option taxes increased capital spending in Georgia counties.

The overall change in expenditures for instructional equipment after the inception of the E-SPLOST was found to be statistically significant since mean per pupil expenditures decreased by 79%. This was not consistent, given that construction and renovation expenditures increased during the same time period. The result is less surprising when considered in historical context. The early time period of the study (1994-1997) coincides with rapid advances in technology including increased engagement with the Worldwide Web through the Internet (Reiser, 2001). These early

efforts to add computers and other technology infrastructure in order to engage the Worldwide Web help to explain why school districts were spending on average \$117.70 per student to acquire instructional equipment. It wasn't until 1998, however, that the Federal Telecommunications Act began infusing large subsidies into public schools through the E-Rate program (Goolsbee & Guryan, 2006). According to a report by Harris (2003) for The Education and Libraries Networks Coalition, Georgia received more than \$344 million in E-Rate funding. This infusion of funding through E-Rate is likely a primary factor associated with the notable decrease in per pupil expenditure amounts for instructional equipment.

Unlike Georgia's state funding program for schools, the Georgia Quality Basic Education Act (QBE), the E-SPLOST is collected and utilized locally. Consequently, the proceeds and their usefulness are directly related to the local economy. Several constructs of this study explored how the E-SPLOST has impacted the equity of capital outlay expenditures. The analyses conducted for Research Question 2 disclosed the arguably positive trend that construction expenditures, whether for new construction or renovation, became more equitable since the inception of the E-SPLOST. This finding is important, since one of the themes that emanated from survey responders encompassed perceived factors associated with disparity of the E-SPLOST. The finding suggests that the E-SPLOST has been a relatively positive source of funding for Georgia school districts in providing capital resources for students and staff. As Goldman and Wachs (2003) asserted: "local option taxes have become the levers by which communities ensure that favored but expensive projects are built" (p. 20).

Two of this study's research questions explored the question of whether capital outlay expenditures were correlated with student achievement. The analysis related to Research Question 5 revealed that math SAT scores and expenditures for new equipment and land or improvements to existing facilities were significantly correlated; it is worthwhile to note, however, that the correlation was small. The correlation between expenditures for instructional equipment and math SAT scores was found to be nonsignificant. The analysis for Research Question 7 found no correlational significance. This aspect of the study was limited, since math SAT data for the early time period of the study were unavailable. Such challenges were referenced by Picus, Marion, Calvo and Glenn (2005) who determined that most studies that attempt to link student achievement and facilities suffer from methodological problems. Adding to the ambivalence, Stricherz (2000) noted that student achievement in outdated schools tends to lag; however, there is no evidence that student achievement increases when facilities are improved. Conversely, Moore and Warner (1998) found significant differences in student achievement in their before-and-after study involving 19 schools that experienced a renovation in Syracuse, New York.

Another aim of this study was to determine whether the perceptions of superintendents and board members regarding the impact of the E-SPLOST vary by location or role. The associated analysis revealed no significant differences, additional evidence that the E-SPLOST is viewed positively as a funding mechanism. In response to the open-ended question included on the survey, several respondents offered that some localities may benefit more so than others due to local economic infrastructure and spending. The finding of no statistically significant differences of opinion with regard to

the usefulness of the E-SPLOST however suggests that varying economic conditions from district to district have not negatively impacted superintendents' and board members' position that in the E-SPLOST serves as a positive mechanism for funding capital outlay. It is apparent to the researcher that the tolerance for differences suggests a "good for me, better for him, but still good for me" viewpoint regarding the usefulness of the E-SPLOST.

Chapter II explored social justice (Rawls, 1971; Young, 1990) as a theoretical underpinning of this study. Since E-SPLOST proceeds are a function of local spending, it is arguable that a proponent of social justice would advocate for some type of redistribution to ensure benefits to students as a result of the E-SPLOST are equitable. In response to the open-ended survey question, three board members suggested that the methodology for collection and distribution of the E-SPLOST be adjusted so that school districts within a region could benefit as a conglomerate instead of benefitting county-by-county. This suggestion is representative of social justice thought. The lack of statistically significant differences in perception (RQ 6) however, suggests that perceived benefits of the E-SPLOST outweigh any variance in the capacity of locally generated E-SPLOST proceeds.

Another theoretical underpinning explored in Chapter II was elite unity theory as proposed by Zaller (1992). Elite unity theory suggests that gaining approval from the community, in part, hinges on the ability of local leaders to make a clear and compelling case for action so that other politically attentive members of the community will adopt the same viewpoint. School board member responses to the open-ended question

supported this notion by professing the importance of gaining understanding and trust with regard to the purpose and administration of the E-SPLOST.

#### Limitations

There were factors that limited the findings of this study. The school districts and participants were limited to the state of Georgia. The reader should be cautious about generalizing conclusions to other states. The study was primarily devoted to exploring expenditure data as opposed to revenue data. Doing so required multiple years of data to be collected since capital outlay tends to exhibit greater variance than operating expenses or revenue (R. Rubenstein, personal communication, 2011). The purpose for utilizing eight years of expenditure data was to lessen the variability of the raw data as would be the case if data from only two years were to be utilized. Even so, some school districts had no expenditures for the years included in the study. Such values may have increased any skew of the distributions which could have impacted results of some of the tests conducted.

The availability of math SAT data was limited to the 2004-2008 time period of the study. Georgia was in the midst of curricular and student assessment changes during the years of the study. Accordingly the math portion of the SAT was chosen as the only measure of student achievement for comparison purposes. Unfortunately, comparison SAT data for the 1994-1997 years were unavailable.

The number of responses to the survey, while sufficient to produce usable results, was extremely low at 6% overall. Further, the number of questions used for the impact and equity constructs of the E-SPLOST was limited to two for each. A higher response rate might have made a difference in some of the findings, particularly when comparing

perceptions with expenditures as a function of location or per pupil property wealth. The need to exclude state legislators from the analyses due to extremely low response rate barred the researcher's intent to compare responses across all three stakeholder groups.

#### Recommendations for Policy and Practice

This study focused on expenditures as a manifestation of the E-SPLOST. The results indicated that per-pupil expenditures have generally become more equitable since the inception of the tax. Nonetheless, debate has continued regarding revenue and the equity of the sales tax base across localities in Georgia (Brunner & Warner 2012). As a one percent sales tax, the E-SPLOST is regressive in that it imposes a heavier burden relatively for lower income citizens. To help offset such an impact on lower income citizens, the state could consider exempting goods and services related to basic necessities such as food from the E-SPLOST.

Several respondents posited that the capacity of the E-SPLOST to meet local needs is dependent on the local sales tax base. To address the revenue disadvantage due to the socio-economic characteristics of a school district's region, the state could consider disbursing state aid in inverse proportion to the local sales tax base. The state might also consider creating regional E-SPLOST cooperatives in which multiple counties and cities could be combined and share proportionally E-SPLOST proceeds.

Lastly, this study made evident that capital outlay expenditures for new construction increased between the late 1990's and late 2000's. Undoubtedly, new construction projects have added to the inventory of school facilities in Georgia; this will boost the need and cost for maintenance in the future. The state and localities should determine whether additional flexibility with regard to use of E-SPLOST proceeds should

be allowed to address future needs associated with maintaining and operating new facilities constructed using E-SPLOST proceeds.

### Recommendations for Future Research

The following recommendations for future research would advance understanding of the E-SPLOST and its continued impact:

1. Future research is recommended in the area of the E-SPLOST as a source of revenue. This study explored expenditure data to infer how equitably the E-SPLOST is serving all of Georgia's school districts. It would be of additional benefit to explore the equity of E-SPLOST collections (revenue).
2. Future research that examines possible relationships between updated or newly constructed facilities using E-SPLOST proceeds and student achievement across multiple grade levels should be conducted.
3. Future research that includes additional years of expenditure data should be conducted to explore whether expenditures are becoming more or less equitable.
4. To improve the generalizability of this study's results, future research should be conducted to determine whether local option sales taxes in other states are successful in addressing capital outlay needs equitably.
5. The response rate for the study's survey was extremely low. Future research could be conducted to expand the qualitative exploration of this study.

### Summary

The purpose of this study was to determine if per pupil capital outlay expenditures have increased significantly as a result of the E-SPLOST. The researcher also sought to

determine how the E-SPLOST impacted equity with regard to capital outlay expenditures. The study also examined whether differences in expenditures between school districts varied as a function of location or per pupil property wealth. It was also of interest to determine if differences in student achievement correlated with capital outlay or if the particular purpose to which capital outlay was applied impacted student achievement on the math SAT test.

The study was primarily conducted as a quantitative study; however, qualitative data collected through an open-ended question were used to expand the quantitative findings. The study employed a mixed-method sequential explanatory design that utilized quantitative and qualitative data. Capital outlay expenditure data were collected for all 178 school districts in Georgia that have utilized the E-SPLOST since its inception. In addition, tax digest for all 178 localities included in the study were collected as was math SAT data as available. The study used an original instrument entitled E-SPLOST Survey that included 12 common items for all participants and three additional items for superintendents. The instrument concluded with an open-ended question, the responses to which were used to expand upon the statistical findings.

The quantitative phase of the study showed per pupil capital outlay expenditures for construction-related activity increased, but not at a level of significance. Conversely, differences in instructional equipment expenditures were significant, indicating a decrease. Additional analyses found that construction-related capital outlay has become more equitable across all of Georgia school districts since the inception of the E-SPLOST. Exploration for capital outlay differences according to location and per pupil property wealth produced results indicating no significant effect. Math SAT scores were

used to determine if achievement correlated with post E-SPLOST expenditures or if the purpose for which E-SPLOST proceeds were applied impacted performance. Neither of the tests used revealed any statistical significance.

The qualitative phase of the study examined the perspectives of superintendents, school board members, and state legislators regarding the conditions that will increase the E-SPLOST's capacity to address capital outlay related needs of school districts. Too few state legislators responded to the survey to be included; however, responses from superintendents and school board members were aggregated into three primary themes: increased commerce and consumer spending, community understanding of the E-SPLOST, and perceived factors associated with disparity of the E-SPLOST.

Respondents agreed that a robust local economy and improved understanding about the E-SPLOST's purpose and usefulness by the community are important variables to the future of the E-SPLOST as a funding source. Respondents also confirmed that proceeds from the E-SPLOST vary as a function of local spending. School board members in particular offered suggestions to possibly mitigate any disparities caused by differences in economic conditions between localities.

The study also included recommendations for future research with regard to the E-SPLOST as revenue to determine if the results of this study pertaining to equity on the expenditure side hold true. Additional research is also recommended as to facility improvement made possible by the E-SPLOST and student achievement as well as expansion of this study to include additional years of data or other states that have utilized a local option sales tax to support schools. Other recommendations include suggested changes in policy and practice. It was the goal of the researcher to expand the

current knowledge base of the E-SPLOST as a funding mechanism for school facilities.

Through the E-SPLOST, localities in Georgia have, and continue, to demonstrate a commitment to provide necessary and proper schools and equipment.

## APPENDIX A

## E-SPLOST SURVEY FOR GEORGIA SCHOOL SUPERINTENDENTS

As a superintendent associated with a school district that has utilized Education Special Purpose Local Option Sales Tax (E-SPLOST) proceeds, please select the descriptor that best represents your opinion following each statement.

---

I serve as Superintendent of the:

\_\_\_\_\_ County School District

\_\_\_\_\_ City School District

1. The E-SPLOST has served as our school district's primary funding source to build or renovate educational facilities.

**Strongly Agree    Agree    Undecided    Disagree    Strongly Disagree**

2. The E-SPLOST has allowed our school district to make improvements to our school facilities that otherwise would not have been made.

**Strongly Agree    Agree    Undecided    Disagree    Strongly Disagree**

3. The E-SPLOST has provided our school district adequate funding to build, renovate or equip our district's educational facilities.

**Strongly Agree    Agree    Undecided    Disagree    Strongly Disagree**

4. The issuance of a general obligation bond repaid with property taxes only (without proceeds from an E-SPLOST), would provide adequate funding to build or renovate educational facilities for our district.

**Strongly Agree    Agree    Undecided    Disagree    Strongly Disagree**

5. For elementary schools, our district has used the greatest amount of E-SPLOST funding to:
- A) **Provide additional, or renovate existing instructional classrooms or spaces**
  - B) **Provide additional or renovate existing ancillary facilities such as auditoriums and cafeterias**
  - C) **Provide additional or upgrade existing technology infrastructure and/or equipment**
  - D) **We have not utilized E-SPLOST funding for school district buildings where students attend.**
6. For middle or junior high schools, our district has used the greatest amount of E-SPLOST funding to:
- A) **Provide additional, or renovate existing instructional classrooms or spaces**
  - B) **Provide additional or renovate existing ancillary facilities such as auditoriums and cafeterias**
  - C) **Provide additional or upgrade existing technology infrastructure and/or equipment**
  - D) **We have not utilized E-SPLOST funding for school district buildings where students attend.**
7. For high schools, our district has used the greatest amount of E-SPLOST funding to:
- A) **Provide additional, or renovate existing instructional classrooms or spaces**
  - B) **Provide additional or renovate existing ancillary facilities such as auditoriums and cafeterias**
  - C) **Provide additional or upgrade existing technology infrastructure and/or equipment**
  - D) **We have not utilized E-SPLOST funding for school district buildings where students attend.**
8. I believe the geographic location of my school district negatively impacts E-SPLOST proceeds used to improve school facilities and equipment in my district.

**Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree**

9. I believe the geographic location of my school district positively impacts E-SPLOST proceeds used to improve school facilities and equipment in my district.

**Strongly Agree    Agree    Undecided    Disagree    Strongly Disagree**

10. The assessed property wealth associated with our district relates to the amount of money our district can raise through an E-SPLOST.

**Strongly Agree    Agree    Undecided    Disagree    Strongly Disagree**

11. Once approved by the voters, the E-SPLOST benefits each Georgia school district equitably in providing facilities and capital equipment for students.

**Strongly Agree    Agree    Undecided    Disagree    Strongly Disagree**

12. Overall, I believe the E-SPLOST to be a more lucrative method for raising money than traditional bonding (repaid through property tax only) for capital outlay needs in our school district.

**Strongly Agree    Agree    Undecided    Disagree    Strongly Disagree**

13. It is a priority for our district to ensure students attend school in a modern and attractive school facility.

**Strongly Agree    Agree    Undecided    Disagree    Strongly Disagree**

14. I believe that the quality of the school facility has a significant impact on student achievement.

**Strongly Agree    Agree    Undecided    Disagree    Strongly Disagree**

15. Without E-SPLOST proceeds, our district would not be able to build, maintain, or equip adequate educational facilities for our students.

**Strongly Agree    Agree    Undecided    Disagree    Strongly Disagree**

Final Question:

In your opinion, what conditions will increase the E-SPLOST's capacity to address the capital outlay needs of your district? Please explain.

## APPENDIX B

## E-SPLOST SURVEY FOR GEORGIA SCHOOL BOARD MEMBERS

As a school board member associated with a school district that has utilized Education Special Purpose Local Option Sales Tax (E-SPLOST) proceeds, please select the descriptor that best represents your opinion following each statement.

---

The school district with which I am associated is located in one of the following counties:

Barrow, Bartow, Butts, Carroll, Chambers, Cherokee, Clayton, Cobb, Coweta, Dawson, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Hall, Haralson, Heard, Henry, Jasper, Lamar, Meriweather, Newton, Paulding, Pickens, Pike, Polk, Putnam, Rockdale, Spalding, Upson, or Walton.

**YES**

**NO**

1. The E-SPLOST has served as our school district's primary funding source to build or renovate educational facilities.

**Strongly Agree    Agree            Undecided    Disagree    Strongly Disagree**

2. The E-SPLOST has allowed our school district to make improvements to our school facilities that otherwise would not have been made.

**Strongly Agree    Agree            Undecided    Disagree    Strongly Disagree**

3. The E-SPLOST has provided our school district adequate funding to build, renovate or equip our district's educational facilities.

**Strongly Agree    Agree            Undecided    Disagree    Strongly Disagree**

4. The issuance of a general obligation bond repaid with property taxes only (without proceeds from an E-SPLOST), would provide adequate funding to build or renovate educational facilities for our district.

**Strongly Agree    Agree            Undecided    Disagree    Strongly Disagree**

5. I believe the geographic location of my school district negatively impacts E-SPLOST proceeds used to improve school facilities and equipment in my district.

**Strongly Agree    Agree            Undecided    Disagree    Strongly Disagree**

6. I believe the geographic location of my school district positively impacts E-SPLOST proceeds used to improve school facilities and equipment in my district.

**Strongly Agree    Agree            Undecided    Disagree    Strongly Disagree**

7. The assessed property wealth associated with our district relates to the amount of money our district can raise through an E-SPLOST.

**Strongly Agree    Agree            Undecided    Disagree    Strongly Disagree**

8. Once approved by the voters, the E-SPLOST benefits each Georgia school district equitably in providing facilities and capital equipment for students.

**Strongly Agree    Agree            Undecided    Disagree    Strongly Disagree**

9. Overall, I believe the E-SPLOST to be a more lucrative method for raising money than traditional bonding (repaid through property tax only) for capital outlay needs in our school district.

**Strongly Agree    Agree            Undecided    Disagree    Strongly Disagree**

10. It is a priority for our district to ensure students attend school in a modern and attractive school facility.

**Strongly Agree    Agree            Undecided    Disagree    Strongly Disagree**

11. I believe that the quality of the school facility has a significant impact on student achievement.

**Strongly Agree    Agree            Undecided    Disagree    Strongly Disagree**

12. Without E-SPLOST proceeds, our district would not be able to build, maintain, or equip adequate educational facilities for our students.

**Strongly Agree    Agree            Undecided    Disagree    Strongly Disagree**

Final Question:

In your opinion, what conditions will increase the E-SPLOST's capacity to address the capital outlay needs of your district? Please explain.

## APPENDIX C

## E-SPLOST SURVEY FOR GEORGIA STATE LEGISLATORS

As a state legislator associated with a school district(s) that has utilized Education Special Purpose Local Option Sales Tax (E-SPLOST) proceeds, please select the descriptor that best represents your opinion following each statement.

---

The school district (or districts) with which I am associated is located in one of the following counties:

Barrow, Bartow, Butts, Carroll, Chambers, Cherokee, Clayton, Cobb, Coweta, Dawson, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Hall, Haralson, Heard, Henry, Jasper, Lamar, Meriweather, Newton, Paulding, Pikens, Pike, Polk, Putnam, Rockdale, Spalding, Upson, or Walton.

YES

NO

1. The E-SPLOST has served as the primary funding source to build or renovate educational facilities in the legislative district I represent.

**Strongly Agree**   **Agree**   **Undecided**   **Disagree**   **Strongly Disagree**

2. The E-SPLOST has allowed school systems in my legislative district to make improvements to school facilities that otherwise would not have been made.

**Strongly Agree**   **Agree**   **Undecided**   **Disagree**   **Strongly Disagree**

3. The E-SPLOST has provided school systems in my legislative district adequate funding to build, renovate or equip educational facilities.

**Strongly Agree**   **Agree**   **Undecided**   **Disagree**   **Strongly Disagree**

4. The issuance of a general obligation bond repaid with property taxes only (without proceeds from an E-SPLOST), would provide adequate funding to build or renovate educational facilities for school systems in my legislative district..

**Strongly Agree**   **Agree**   **Undecided**   **Disagree**   **Strongly Disagree**

5. I believe the geographic location of school systems in my legislative district negatively impacts E-SPLOST proceeds.

**Strongly Agree   Agree                      Undecided                      Disagree                      Strongly Disagree**

6. I believe the geographic location of school systems in my legislative district positively impacts E-SPLOST proceeds.

**Strongly Agree   Agree                      Undecided                      Disagree                      Strongly Disagree**

7. The assessed property wealth associated with school systems in my legislative district is related to the amount of money our district can raise through an E-SPLOST.

**Strongly Agree   Agree                      Undecided                      Disagree                      Strongly Disagree**

8. Once approved by the voters, the E-SPLOST benefits each Georgia school district equitably in providing facilities and capital equipment for students.

**Strongly Agree   Agree                      Undecided                      Disagree                      Strongly Disagree**

9. Overall, I believe the E-SPLOST to be a more lucrative method for raising money than traditional bonding (repaid through property tax only) for capital outlay needs in school systems located in my legislative district.

**Strongly Agree   Agree                      Undecided                      Disagree                      Strongly Disagree**

10. I believe the school systems in my legislative district make it a priority to ensure students attend school in a modern and attractive school facility.

**Strongly Agree   Agree                      Undecided                      Disagree                      Strongly Disagree**

11. I believe that the quality of the school facility has a significant impact on student achievement.

**Strongly Agree   Agree                      Undecided                      Disagree                      Strongly Disagree**

12. Without E-SPLOST proceeds, school systems in my legislative district would not be able to build, maintain, or equip adequate educational facilities for students.

**Strongly Agree    Agree            Undecided    Disagree    Strongly Disagree**

Final Question:

In your opinion, what conditions will increase the E-SPLOST's capacity to address the capital outlay needs of your district? Please explain.

## APPENDIX D

## COVER LETTER TO PARTICIPANTS – LEGISLATORS AND BOARD MEMBERS

Dear Participant,

I am currently a doctoral candidate at the University of Southern Mississippi. I am conducting a research study which will include the perceptions of superintendents, board members, and state legislators regarding the impact of the E-SPLOST on capital outlay expenditures. I am interested in your professional opinion regarding the use of E-SPLOST by the districts you serve or represent. Please take a few moments of your time to complete this questionnaire. The survey should take no more than 20 minutes to complete. The questionnaire contains 3 types of questions. The first item seeks demographic information about the geographic location of the school district(s) you serve or represent. The next group of questions ask you to rate items on a continuum from strongly agree to strongly disagree in reference to your beliefs about past and potential impact of the E-SPLOST on your district's ability to provide and equip school facilities. The final question asks for your open-ended response on the ways that E-SPLOST has affected the ability of school districts to provide services. Upon completion of the analysis of information, findings will be shared with my dissertation committee.

The data collected from the completed questionnaires will be compiled and analyzed. All data collected is anonymous. All information gathered will be kept completely confidential and reported only in aggregate. To ensure confidentiality of superintendents, board members, and state legislators, no one will be identified by name. Upon completion of this research study, I will shred all surveys. As the researcher, I am very appreciative for your participation; your completed questionnaire will serve as your consent to participate. However, you have the option to decline to participate if you so wish. If you decide to withdraw from participation at any time there is no penalty or risk of negative consequence.

As a part of this study, I will be asking superintendents, board members, and state legislators to complete a survey to gather data that can provide valuable information on the impact the E-SPLOST has had in providing facilities and equipment for all of Georgia's students. I will use the data you provide to add to the research bank on the impact of the E-SPLOST. Should you have any questions please contact: Robert Benson, email: rbbenson@bellsouth.net; phone: 770-422-9172. This research is conducted under the supervision of Dr. Mike Ward, University of Southern Mississippi, email: mike.ward@usm.edu; 601-266-4580.

This research project has been reviewed and approved by the Human Subjects Protection Review Committee, which ensures that all research fits the federal guidelines for research involving human subjects. Any questions or concerns about the rights of a research participant should be directed to the Chair of the Institutional Review Board, The University of Southern Mississippi, 118 College Drive #5147, Hattiesburg, MS 39406-0001, (601) 266-6820.

Thank you for your participation.  
Sincerely,

Robert B. Benson

APPENDIX E  
ADULT CONSENT FOR RESEARCH FORM  
LEGISLATORS AND BOARD MEMBERS

**University of Southern Mississippi  
118 College Drive #5147  
Hattiesburg, MS 39406-0001  
(601)266-6820**

**Consent to Participate in a Research Study**

**Date: September 17, 2013**

**Title of Study: An Analysis of the Impact of the Education Special Purpose Local  
Option Sales Tax (E-SPLOST) on Capital Outlay Expenditures in Georgia School  
Districts**

**Research will be conducted by: Robert Benson (540) 907 9426**

**Email Address: rbbenson@bellsouth.net**

**Faculty Advisor: Dr. Mike Ward**

---

**What are some general things you should know about research studies?**

You are being asked to take part in a research study. Your participation in this research study is voluntary and there are no negative consequences if you choose not to participate in the research. You may refuse to join, or you may withdraw your consent to be in the study, for any reason and at any time, without penalty.

Research studies are designed to obtain new knowledge. This new information may help people in the future. You may not receive any direct benefit from being in the research study. There also may be risks to being in research studies.

Details about this study are discussed below. It is important that you understand this information so that you can make an informed choice about being in this research study. You should ask the researchers named above, or staff members who may assist them, any questions you have about this study at any time.

**What is the purpose of this study?**

The purpose of this research study is to determine how, and to what extent, Georgia's Education Special Purpose Local Option Sales Tax (E-SPLOST) has impacted capital outlay expenditures for school facilities and equipment. The study will further examine relationships among changes in capital outlay expenditures, geographic region, district wealth, and student achievement. An additional aspect of the study is to determine if the opinions of local school district superintendents, board of education members, and state-level legislators differ regarding the usefulness of the E-SPLOST as a viable funding mechanism to meet capital outlay needs in participants' respective districts.

**How many people will take part in this study?**

If you decide to be in this study, you will be one of approximately 1500 people in this research study.

**How long will your part in this study last?**

You will be asked to fill out a survey, which will last no longer than 20 minutes. You may request a report of my findings at the conclusion of this study by emailing me at rbbenson@bellsouth.net.

**What will happen if you take part in the study?**

You will be asked to complete the survey instrument. The survey will be delivered electronically and will include a cover letter and the instrument. The cover letter requests participation and provides the guidelines of informed consent. The letter advises that your participation is voluntary and that there are no negative consequences for choosing not to participate in the research. Should you choose to participate, your completed instrument will indicate your consent to be part of the study. At the end of the instrument, participants will be asked to submit their responses electronically. The researcher will maintain confidentiality of responses by storing all information on an external memory drive which will be secured in a locked file box when not in use. The survey instrument and data will be shredded upon completion of this project.

**What are the possible benefits from being in this study?**

The benefits of this study lie in the recording of key stakeholder perceptual beliefs regarding the usefulness of the E-SPLOST to fund local school districts' capital outlay needs. The recording of these beliefs is important to future school district leaders and state level legislators, given that Georgia is in the process of considering recommendations from a state commission and other stakeholders as to how to best fund public education. Additional value will accrue from assessing the degree to which such expenditures are related to geographic region, district wealth, and student achievement. The findings may lead to conclusions that can be used to assist law and policy makers in Georgia develop a more effective method for funding public education. . Participants may request a summary from rbbenson@bellsouth.net.

**What are the possible risks or discomforts involved with being in this study?**

The risks are that the respondents may not feel comfortable answering questions regarding their opinions about the E-SPLOST. However, to alleviate any possible risks

or inconvenience to the participants, the following procedures will take place. Participants will be informed that their participation in the survey is voluntary; participation may be discontinued at any time without penalty or prejudice to the participant. Additionally, the participants' responses shall be anonymous and confidential. No superintendent, board of education member, or legislator will be singled out or identified. All survey data collected for this study will be destroyed by shredder after one year.

**How will your privacy be protected?**

The data gathered will be kept strictly confidential in a safe location in the researcher's home with only the researcher and committee members having access to the participants' responses. All survey data collected for this study will be destroyed by shredder after one year.

**What if you have questions about this study?**

You have the right to ask, and have answered, any questions you may have about this research. If you have questions, or concerns, you should contact the researcher listed on the first page of this form.

**What if you have questions about your rights as a research participant?**

This project has been reviewed by the Human Subjects Protection Review Committee, which ensures that research projects involving human subjects follow federal regulations. Any questions or concerns about your rights as a research subject should be directed to the chair of the Institutional Review Board, The University of Southern Mississippi, 118 College Drive #5147, Hattiesburg, MS 39406-0001, (601) 266-6820.

## APPENDIX F

## COVER LETTER TO PARTICIPANTS - SUPERINTENDENTS

Dear Participant,

I am currently a doctoral candidate at the University of Southern Mississippi. I am conducting a research study which will include the perceptions of superintendents, board members, and state legislators regarding the impact of the E-SPLOST on capital outlay expenditures. I am interested in your professional opinion regarding the use of E-SPLOST by the districts you serve or represent. Please take a few moments of your time to complete this questionnaire. The survey should take no more than 20 minutes to complete. The questionnaire contains 3 types of questions. The first item seeks demographic information about the geographic location of the school district(s) you serve or represent. The next group of questions ask you to rate items on a continuum from strongly agree to strongly disagree in reference to your beliefs about past and potential impact of the E-SPLOST on your district's ability to provide and equip school facilities. The final question asks for your open-ended response on the ways that E-SPLOST has affected the ability of school districts to provide services. Upon completion of the analysis of information, findings will be shared with my dissertation committee.

The data collected from the completed questionnaires will be compiled and analyzed. All data collected is anonymous. All information gathered will be kept completely confidential and reported only in aggregate. To ensure confidentiality of superintendents, board members, and state legislators, no one will be identified by name. Upon completion of this research study, I will shred all surveys. As the researcher, I am very appreciative for your participation; your signature on the adult consent for research form will serve as your consent to participate. However, you have the option to decline to participate if you so wish. If you decide to withdraw from participation at any time there is no penalty or risk of negative consequence.

As a part of this study, I will be asking superintendents, board members, and state legislators to complete a survey to gather data that can provide valuable information on the impact the E-SPLOST has had in providing facilities and equipment for all of Georgia's students. I will use the data you provide to add to the research bank on the impact of the E-SPLOST. Should you have any questions please contact: Robert Benson, email: rbbenson@bellsouth.net; phone: 770-422-9172. This research is conducted under the supervision of Dr. Mike Ward, University of Southern Mississippi, email: mike.ward@usm.edu; 601-266-4580.

This research project has been reviewed and approved by the Human Subjects Protection Review Committee, which ensures that all research fits the federal guidelines for research involving human subjects. Any questions or concerns about the rights of a research participant should be directed to the Chair of the Institutional Review Board, The University of Southern Mississippi, 118 College Drive #5147, Hattiesburg, MS 39406-0001, (601) 266-6820.

Thank you for your participation.  
Sincerely,

Robert B. Benson

## APPENDIX G

## ADULT CONSENT FOR RESEARCH FORM - SUPERINTENDENT

**University of Southern Mississippi  
118 College Drive #5147  
Hattiesburg, MS 39406-0001  
(601)266-6820**

**Consent to Participate in a Research Study**

**Date: September 17, 2013**

**Title of Study: An Analysis of the Impact of the Education Special Purpose Local  
Option Sales Tax (E-SPLOST) on Capital Outlay Expenditures in Georgia School  
Districts**

**Research will be conducted by: Robert Benson (540) 907 9426**

**Email Address: rbbenson@bellsouth.net**

**Faculty Advisor: Dr. Mike Ward**

---

**What are some general things you should know about research studies?**

You are being asked to take part in a research study. Your participation in this research study is voluntary and there are no negative consequences if you choose not to participate in the research. You may refuse to join, or you may withdraw your consent to be in the study, for any reason and at any time, without penalty.

Research studies are designed to obtain new knowledge. This new information may help people in the future. You may not receive any direct benefit from being in the research study. There also may be risks to being in research studies.

Details about this study are discussed below. It is important that you understand this information so that you can make an informed choice about being in this research study. You should ask the researchers named above, or staff members who may assist them, any questions you have about this study at any time.

**What is the purpose of this study?**

The purpose of this research study is to determine how, and to what extent, Georgia's Education Special Purpose Local Option Sales Tax (E-SPLOST) has impacted capital

outlay expenditures for school facilities and equipment. The study will further examine relationships among changes in capital outlay expenditures, geographic region, district wealth, and student achievement. An additional aspect of the study is to determine if the opinions of local school district superintendents, board of education members, and state-level legislators differ regarding the usefulness of the E-SPLOST as a viable funding mechanism to meet capital outlay needs in participants' respective districts.

**How many people will take part in this study?**

If you decide to be in this study, you will be one of approximately 1500 people in this research study.

**How long will your part in this study last?**

You will be asked to fill out a survey, which will last no longer than 20 minutes. You may request a report of my findings at the conclusion of this study by emailing me at [rbbenson@bellsouth.net](mailto:rbbenson@bellsouth.net).

**What will happen if you take part in the study?**

You will be asked to complete the survey instrument. The survey will be delivered electronically and will include a cover letter and the instrument. The cover letter requests participation and provides the guidelines of informed consent. The letter advises that your participation is voluntary and that there are no negative consequences for choosing not to participate in the research. At the end of the instrument, participants will be asked to submit their responses electronically. The researcher will maintain confidentiality of responses by storing all information on an external memory drive which will be secured in a locked file box when not in use. The survey instrument and data will be shredded upon completion of this project.

**What are the possible benefits from being in this study?**

The benefits of this study lie in the recording of key stakeholder perceptual beliefs regarding the usefulness of the E-SPLOST to fund local school districts' capital outlay needs. The recording of these beliefs is important to future school district leaders and state level legislators, given that Georgia is in the process of considering recommendations from a state commission and other stakeholders as to how to best fund public education. Additional value will accrue from assessing the degree to which such expenditures are related to geographic region, district wealth, and student achievement. The findings may lead to conclusions that can be used to assist law and policy makers in Georgia develop a more effective method for funding public education. Participants may request a summary from [rbbenson@bellsouth.net](mailto:rbbenson@bellsouth.net).

**What are the possible risks or discomforts involved with being in this study?**

The risks are that the respondents may not feel comfortable answering questions regarding their opinions about the E-SPLOST. However, to alleviate any possible risks or inconvenience to the participants, the following procedures will take place. Participants will be informed that their participation in the survey is voluntary; participation may be discontinued at any time without penalty or prejudice to the participant. Additionally, the participants' responses shall be anonymous and

confidential. No superintendent, board of education member, or legislator will be singled out or identified. All survey data collected for this study will be destroyed by shredder after one year.

**How will your privacy be protected?**

The data gathered will be kept strictly confidential in a safe location in the researcher's home with only the researcher and committee members having access to the participants' responses. All survey data collected for this study will be destroyed by shredder after one year.

**What if you have questions about this study?**

You have the right to ask, and have answered, any questions you may have about this research. If you have questions, or concerns, you should contact the researcher listed on the first page of this form.

**What if you have questions about your rights as a research participant?**

This project has been reviewed by the Human Subjects Protection Review Committee, which ensures that research projects involving human subjects follow federal regulations. Any questions or concerns about your rights as a research subject should be directed to the chair of the Institutional Review Board, The University of Southern Mississippi, 118 College Drive #5147, Hattiesburg, MS 39406-0001, (601) 266-6820.

## APPENDIX H

## INSTITUTIONAL REVIEW BOARD NOTICE OF COMMITTEE ACTION



THE UNIVERSITY OF  
SOUTHERN MISSISSIPPI

## INSTITUTIONAL REVIEW BOARD

118 College Drive #5147 | Hattiesburg, MS 39406-0001

Phone: 601.266.6820 | Fax: 601.266.4377 | www.usm.edu/irb

---

**NOTICE OF COMMITTEE ACTION**

The project has been reviewed by The University of Southern Mississippi Institutional Review Board in accordance with Federal Drug Administration regulations (21 CFR 26, 111), Department of Health and Human Services (45 CFR Part 46), and university guidelines to ensure adherence to the following criteria:

- The risks to subjects are minimized.
- The risks to subjects are reasonable in relation to the anticipated benefits.
- The selection of subjects is equitable.
- Informed consent is adequate and appropriately documented.
- Where appropriate, the research plan makes adequate provisions for monitoring the data collected to ensure the safety of the subjects.
- Where appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of all data.
- Appropriate additional safeguards have been included to protect vulnerable subjects.
- Any unanticipated, serious, or continuing problems encountered regarding risks to subjects must be reported immediately, but not later than 10 days following the event. This should be reported to the IRB Office via the "Adverse Effect Report Form".
- If approved, the maximum period of approval is limited to twelve months.

Projects that exceed this period must submit an application for renewal or continuation.

PROTOCOL NUMBER: **131008010**

PROJECT TITLE: **An Analysis of the Impact of the Education Special Purpose Local Option Sales Tax (E-SPLOST) on Capital Outlay Expenditures in Georgia School Districts**

PROJECT TYPE: **Dissertation**

RESEARCHER(S): **Robert B. Benson**

COLLEGE/DIVISION: **College of Education and Psychology**

DEPARTMENT: **Educational Leadership and School Counseling**

FUNDING AGENCY/SPONSOR: **N/A**

IRB COMMITTEE ACTION: **Expedited Review Approval**

PERIOD OF APPROVAL: **10/22/2013 to 10/21/2014**

**Lawrence A. Hosman, Ph.D.**

**Institutional Review Board**

## REFERENCES

- Alexander, K., & Alexander, M.D. (2005). *American public school law* (6<sup>th</sup>ed.). Belmont, CA: Thomson West.
- Alexander, K., & Salmon, R. (1995). *Public school finance*. Needham Heights, MA: Simon & Schuster.
- Arneson, R. (2000). Economic analysis meets distributive justice. *Social Theory and Practice*, 26(2), 327-345.
- Arneson, R. (2008). Justice is not equality. *Ratio*, 21(4), 371-391.  
doi: 10.1111/j.1467-9329.2008.00409.x
- Aronson, J. (1994). A pragmatic view of thematic analysis. *The Qualitative Report*, 2(1), 16-18.
- Boehmke, F., & Bowen, D. (2010). Direct democracy and individual interest group membership. *Journal of Politics*, 72(3), 659-671.  
doi: 10.1017/S0022381610000083
- Bond, G. (2011). Does home rule really mean more authority for chartered municipalities? An analysis of building owners & managers association of Pittsburgh v. city of Pittsburgh. *Widener Law Journal*, 20(2), 579-595.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101.
- Briffault, R. (1990). Our localism: Part ii – localism and legal theory. *Columbia Law Review*, 90, 346-454.

- Brown, L., Cook, P., Mayo, M., & Redus, B. (2007). *A policy analysis regarding the financing and construction of new facilities for Missouri public schools*. (Ed.D. dissertation), Retrieved from Dissertations & Theses: Full Text. (Publication No. AAT 3324143).
- Brunner, E. J., & Warner, N. (2012). *School facility funding in Georgia and the educational special purpose local option sales tax (Report No. 250)*. Atlanta, GA: Fiscal Research Center Andrew Young School of Policy Studies Georgia State University.
- Bullock, C. (2007). *The relationship between school building conditions and student achievement at the middle school level in the Commonwealth of Virginia*. (Ph.D. dissertation). Retrieved from Dissertations & Theses: Full Text. (Publication No. AAT 3286978).
- California Department of Education. (2013). The Williams case – an explanation. Retrieved from: <http://www.cde.ca.gov/eo/ce/wc/wmslawsuit.asp>
- City of Clinton v. The Cedar Rapids and Missouri River Railroad Company. 24 Iowa 455 (1868).
- College Board. (2011). *What is the SAT?* Retrieved from: <http://sat.collegeboard.org/about-tests/sat>
- Columbia Electronic Encyclopedia. (2011). *Sinking fund*. Retrieved from: <http://www.reference.com/browse/sinking+fund>
- Cooley, D. (2010). *Small school district consolidation in Texas: An analysis of its impact on costs and student achievement*. (Ed.D. dissertation). Retrieved from Dissertations & Theses: Full Text. (Publication No. AAT 3475766).

- Costner, C. (2009). *Equity to adequacy: A historical analysis of the litigations of Abbeville v. The State of South Carolina*. (Ph. D. Dissertation). Retrieved from Dissertations & Theses: Full Text. (Publication No. AAT 3355135).
- Creswell, J.W. (2003) *Research design: Qualitative, quantitative, and mixed methods approaches (2nd Edition)*. Thousand Oaks, CA: Sage Publications.
- Creswell, J. W., Plano Clark, V.L., Guttman, M., & Hanson, W. (2003). Advanced mixed methods research designs. In A. Tashakkori & C. Teddlie, *Handbook on mixed methods in the behavioral and social sciences* (pp.209-240). Thousand Oaks, CA: Sage.
- Crook, J. (2006). *The relationship between the percentage of students passing the Standards of Learning examinations and the condition of the educational facilities in the high schools in the Commonwealth of Virginia*. (Ed. D. Dissertation). Retrieved from Dissertations & Theses: Full Text. (Publication No. AAT 3231036).
- DeRolph v. State, 677 N.E.2d 733 (Ohio, 1997).
- Earthman, G. (2002). *School facility conditions and student academic achievement*. (Document wws-rr008-1002). University of California, Los Angeles. Retrieved from: <http://escholarship.org/uc/item/5sw56439>
- Earthman, G., & Lemasters, L. (1998). *Where children learn: A discussion of how a facility affects learning*. Available from ERIC database. (ED419368).
- Ferreira, M. (1995). The caring of a suburban middle school. Retrieved from ERIC database (ED385011).
- GA Const., art. VIII, §1.

GA Const., art. VIII, §6.

GA Const., art. IX, §5, paragraph 1

Georgia Department of Education. (2011). *State education finance study commission issue paper: Capital outlay*. Retrieved from:

[http://archives.gadoe.org/\\_documents/fbo\\_financial/7-27-2011%20Capital%20Outlay%20Staff%20Presentation.pdf](http://archives.gadoe.org/_documents/fbo_financial/7-27-2011%20Capital%20Outlay%20Staff%20Presentation.pdf)

Georgia Department of Revenue. (2012a). *Property tax guide for the Georgia tax payer*. Retrieved from:

<https://etax.dor.ga.gov/PTD/adm/taxguide/gen/taxation.aspx>

Georgia Department of Revenue. (2012b). *Summary of ad valorem taxes levied in Georgia*. Retrieved from:

[https://etax.dor.ga.gov/PTD/cds/revenue/LGS\\_Summary\\_of\\_Property\\_Tax\\_Revenue\\_Levied\\_in\\_Georgia\\_Counties\\_2008.pdf](https://etax.dor.ga.gov/PTD/cds/revenue/LGS_Summary_of_Property_Tax_Revenue_Levied_in_Georgia_Counties_2008.pdf)

Georgia School Board. (2010). *Local school board governance*. (Rule 160-5-1-.36)

Georgia School Boards Association. (2012) *Funding Georgia's public schools: An overview*. Retrieved from:

[http://www.gsba.com/downloads/FundingGaPublicSchools\\_talking\\_points.pdf](http://www.gsba.com/downloads/FundingGaPublicSchools_talking_points.pdf) 3 5

Georgia School Funding Association. (2009). *The unfulfilled promise to Georgia's children*. Retrieved from:

[http://www.casfg.org/reports/The\\_Unfulfilled\\_Promise\\_to\\_Georgia's\\_Children.pdf](http://www.casfg.org/reports/The_Unfulfilled_Promise_to_Georgia's_Children.pdf)

Gere, E. (1982). Dillon's Rule and the Cooley Doctrine: Reflections of the political culture. *Journal of Urban History*, 8, 271-298.

- Gillenwater, C. (2006). *Interpreting the viability and longevity of the Leandro Case as it pertains to rectifying known inequities in the North Carolina public schools educational system*. (M.A. dissertation). Retrieved from Dissertations & Theses: Full Text (Publication No. AAT 1432708).
- Goldman, T., & Wachs, M. (2003). A quiet revolution in transportation finance: The rise of local option transportation taxes. *Transportation Quarterly*, 57(1), 19–32.
- Goodlad, J. (1984). *A place called school: Prospects for the future*. New York: McGraw-Hill.
- Goolsbee, A., & Guryan J. (2006). The impact of internet subsidies in public schools. *The Review of Economics and Statistics*, 88(2), 336-347. Retrieved from [http://www.jstor.org/stable/40042999?origin=JSTOR-pdfdoi: 131.95](http://www.jstor.org/stable/40042999?origin=JSTOR-pdfdoi:131.95)
- Gossett, C. W. (2005). *Pushing the envelope: Dillon's Rule and local domestic partnership ordinances*. Paper presented at the Southern Political Science Association Meeting, New Orleans, LA.
- Graham, J. M. (2006). Tau-equivalent estimates of score reliability: What they are and how to use them. *Educational and Psychological Measurement*, 66(6), 930-944. doi: 10.1177/0013164406288165
- Green, A. D. (2007). *Determinants of support for transportation sales taxes in California from 1980-2006*. Paper presented at the annual meeting of the Western Political Science Association. Las Vegas, NV.

- Green, P. C., & Baker, B. D. (2002). Circumventing Rodriguez: Can plaintiffs use the equal protection clause to challenge school finance disparities caused by inequitable state distribution policies? *Texas Journal of Civil Liberties and Civil Rights*, 7(2), 141-165.
- Harris, L. (2003). *E-rate: A vision of opportunity and innovation*. (Retrieved from The Education and Libraries Networks Coalition website:  
<http://www.edlinc.org/pdf/ERateReport070803lores.pdf>
- Harrison, J. H., Jr. (2005). *Examination of revenues from state and local capital outlay on the equity of school capital outlay funding in the state of Florida*. (Ed.D. dissertation). Retrieved from Dissertations & Theses: Full Text. (Publication No. AAT 3174981).
- Haxton, P. (2009). *Capital funding in Oklahoma school districts*. (Ed.D. dissertation). Retrieved from Dissertations & Theses: Full Text. (Publication No. AAT 3359731).
- Hing, L., Bobocel, D., Zanna, M. P., Garcia, D. M., Gee, S. S., & Oraziotti, K. (2011). The merit of meritocracy. *Journal of Personality & Social Psychology*, 101(3), 433-450.
- Ivankova, N. V., Creswell, J. W., & Stick, S. L. (2006). Using mixed-methods sequential explanatory design: From theory to practice. *Field Methods*, 18(1), 3-20.  
doi: 10.1177/1525822X05282260
- Jick, T. J. (1979). Mixing qualitative and quantitative methods: triangulation in action. *Administrative Science Quarterly*, 24(4), 602-611.

- Jung, C. (2000). *An analysis of the special purpose local option sales tax (SPLOST) in Georgia counties, 1984-1997*. (D.P.A. dissertation). Retrieved from Dissertations & Theses: Full Text. (Publication No. AAT 9995966).
- League of Women Voters of the Fairfax Area Education Fund. (2004). *Dillon's rule: Good or bad for local governments?* Retrieved from:  
<http://lwv-fairfax.org/files/lwv-dillon-dtp-99041.pdf>
- Leandro v. State of North Carolina, 488 S.E.2d 249 (N.C. 1997)
- Lemasters, L. K. (1997). *A synthesis of studies pertaining to facilities, student achievement, and student behavior*. (Ed. D. dissertation). Retrieved from Dissertations & Theses: Full Text. (Publication No. AAT 9722616).
- LexisNexis.(2010). *Georgia school laws*. Charlottesville, VA: Matthew Bender and Company, Inc.
- Luke, C. (2007). *Equity in Texas public education facilities funding* (Ed. D. dissertation). Retrieved from Dissertations & Theses: Full Text. (Publication No. AAT 3276451).
- Maslow, A. H., & Mintz, N. L. (1956). Effects of aesthetic surroundings: Initial effects of three aesthetic conditions upon perceiving, "energy", and "well-being" in faces. *Journal of Psychology*, 41, 247-254.
- McCabe, B. J. (2010). *Are homeowners better citizens? New evidence on the behavioral effects of homeownership on local civic participation*. Unpublished manuscript, Department of Sociology, New York University.
- McDaniel v. Thomas, 285 S.E.2d 156 (GA, 1981)

- Mintz, N. L. (1956). Effects of esthetic surroundings: Prolonged and repeated experience in a "beautiful" and an "ugly" room. *The Journal of Psychology*, *41*, 459-466.
- Moore, D. P., & Warner, E. (1998). *Where children learn: The effect of facilities on student achievement*. Retrieved from <http://www.cefpi/cefpi/issue8.html>
- National Center for Education Statistics. (2011). *Common core of data*. Retrieved from: <http://nces.ed.gov/ccd/bat/>
- No Child Left Behind Act of 2001, Pub. L. No. 107-110, § 115, Stat. 1425 (2002).
- Odden, A.R., & Picus, L. O., (2004) *School finance: A policy perspective* (3<sup>rd</sup>ed.). Boston, MA: McGraw-Hill.
- Odden, A.R., & Picus, L.O., (2008) *School finance: a policy perspective* (4<sup>th</sup>ed.). New York, NY: McGraw-Hill
- Official Code of Georgia (O.C.G.A.), §20-2-260
- Official Code of Georgia (O.C.G.A.), §48-5-353
- O'Sullivan, S. (2006). *A study of the relationship between building conditions and student academic achievement in Pennsylvania's high school*. (Ed.D. dissertation), Retrieved from Dissertations & Theses: Full Text. (Publication No.AAT 3255899).
- Paul, D. M., & Brown, C. (2001). Testing the limits of elite influence on public opinion: an examination of sports facility referendums. *Political Research Quarterly*, *54*, 871-888. doi: 10.1177/106591290105400410
- Pauley v. Bailey, 324 S.E.2d 128 (WV, 1982)

- Picus, L. O., Marion, S. F., Calvo, N., & Glenn, W. J. (2005). Understanding the relationship between student achievement and the quality of educational facilities: Evidence from Wyoming. *Peabody Journal of Education* (0161956X), 80(3), 71-95. doi:10.1207/s15327930pje8003\_5
- Rawls, J. (1971). *A theory of justice*. Boston, MA: The Belknap Press of Harvard University.
- Rebell, M. (2004). Remarks of Michael Rebell. *St. John's Law Review*, 78(2), 263-275.
- Reiser, R. A. (2001). A history of instructional design and technology: Part I: A history of instructional media. *Educational Technology Research and Development*, 49(1), 53-64. Retrieved from <http://www.jstor.org/stable/30220299>
- Rivers, J., & Sanders, W. (2002). Teacher quality and equity in educational opportunity: Findings and policy implications. In L. Izumi & W. Evers (Eds.), *Teacher Quality* (pp.13-23). Palo Alto, CA: Hoover Institution.
- Roberts, L. W., Peter, T., & Edgerton, J. D. (2008). The importance of place: Facility conditions and learning outcomes. *Education Canada*, 48(3), 48-51.
- Rodriguez v. San Antonio Independent School District, 337 F. Supp. 280 (TX, 1971)
- Roemer, J. E. (1998). *Equality of opportunity*. Cambridge, MA: Harvard University Press
- Roosevelt Elementary School District No. 66 v. State of Arizona, 74 P.3d 258 (AZ, 1994)
- Rose v. Council for Better Education, 790 S.W.2d 186 (KY, 1989)
- Rubenstein, R., & Freeman, C. (2003). Do local sales taxes for education increase inequities? The case of Georgia's ESPLOST. *Journal of Education Finance*, 28, 425-442.

- Rubenstein R., & Sjoquist D. L. (2003). *Financing Georgia's schools: A primer*. (FRC Report No. 87). Retrieved from Georgia State University, Andrew Young School of Policy Studies website: <http://aysps.gsu.edu/frc/files/report87.pdf>
- Schrag, P. (2003). *The final test: The battle for adequacy in America's schools*. New York: The New Press.
- Schofield, R. (2003). The Leandro case: Where do we go from here? *NC Policy Brief*, 1(4), 1-4.
- Sciarra, D. G., Bell, K., & Kenyon, S. (2006). *Safe and adequate: Using litigation to address inadequate k-12 school facilities*. Education Law Center. Retrieved from: [http://www.edlawcenter.org/ELCPublic/Publications/PDF/Safe\\_and\\_Adequate.pdf](http://www.edlawcenter.org/ELCPublic/Publications/PDF/Safe_and_Adequate.pdf)
- Shock, D. R. (2010). *Assessing organized interests' activities in sales tax referenda in Cobb County, Georgia*. Paper presented at the annual meeting of the Western Political Science Association, San Francisco, California.
- Sielke, C. (2001). Funding school infrastructure needs across the states. *Journal of Education Finance*, 27(2), 653-662.
- Silva, J. F. (1999). *The state-local fiscal relationship in California: A changing balance of power*. San Francisco, CA: Public Policy Institute of California.
- Springer M. G., Liu, K., & Guthrie, J. W. (2009) The impact of school finance litigation on resource distribution: A comparison of court-mandated equity and adequacy reforms. *Education Economics*, 17(4), 421-444. doi:10.1080/09645290802069269

- State Education Finance Study Commission, Georgia Department of Education. (2012). Issue paper: Capital outlay. Retrieved from:  
[http://archives.gadoe.org/\\_documents/fbo\\_financial/StudyCommission/Capital%20Outlay%20Recommendation.pdf](http://archives.gadoe.org/_documents/fbo_financial/StudyCommission/Capital%20Outlay%20Recommendation.pdf)
- Stein, R., Hamm, K., & Freeman, P. (1983). An analysis of support for tax limitation referenda. *Public Choice*, (40), 187-194.
- Stricherz, M. (2000). Bricks and mortarboards. *Education Week*, 20(14), 30-32. Retrieved from <http://www.edweek.org/ew/newstory.cfm?slug=14facilities.h20>
- Syverson, M. S (2005). *The relationship between Indiana high school building conditions and ISTEP math/English scores in Indiana high schools*. (Ph.D. dissertation), Retrieved from Dissertations & Theses: Full Text. (Publication No. AAT 3199428).
- Tanner, K. C. (2009). Effects of school design on student outcomes. *Journal of Educational Administration*, 47(3) 376-394.
- Tavakol, M., & Dennick R. (2011). Making sense of Cronbach's alpha. *International Journal of Medical Education*, 2, 53-55. doi: 10.5116/ijme.4dfb.8dfb
- Thompson, D., Stewart, G., & Camp, W. (1989). Capital outlay funding as an educational equity issue: An empirical examination. *Research in Rural Education*, 6(1), 25-31.
- Thro, W. E. (2009). Judicial humility: the enduring legacy of Rose v. Council for Better Education. *Kentucky Law Journal*, 98, 761.
- U. S. Census Bureau. (2012). Largest US metropolitan areas by population 1990-2010, in *World Almanac and Book of Facts* (pp. 612-613). New York, NY: Simon and Schuster. 2012.

- U. S. General Accounting Office. (1995). *School facilities: Condition of America's Schools*. (GAO/HEHS-95-61). Retrieved from: <http://www.gao.gov/archive/1995/he95061.pdf>
- U. S. General Accounting Office. (1996). *School facilities: State profiles*. (GAO/HEHS-96-148). Retrieved from: <http://www.gao.gov/archive/1996/he96148.pdf>
- U. S. General Accounting Office. (2000). *School facilities: Construction expenditures have grown significantly in recent years*. (GAO/HEHS-00-41). Retrieved from: <http://www.gao.gov/archive/2000/he00041.pdf>
- Young, I. M. (1990). *Justice and the politics of difference*. Princeton, NJ: Princeton University Press.
- Zaller, J. R. (1992). *The nature and origins of mass opinion*. Cambridge, UK: Cambridge University Press.