Fiscal Research Program

**DO LOCAL SALES TAXES
FOR EDUCATION INCREASE
INEQUITIES ? THE CASE OF
GEORGIA'S ESPLOST**

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Introduction

Elementary and secondary education in the United States has traditionally been funded through a complex mix of locally raised revenues and state and federal grants to local education agencies.[1] The heavy reliance in many states on widely disparate local property taxes has resulted in over thirty years of state litigation challenging the equity and adequacy of state efforts to fund schools. While the relative share of total funding provided by state and local governments has fluctuated over the years, often in response to litigation, the property tax has remained the dominant revenue source for local school districts. In 1998-99, property taxes accounted for over 64 percent of local revenues for education nationally, while other taxes raised only 3 percent.[2]

While sales and use taxes for local governments have a long history in the U.S., sales tax revenue earmarked for education is a more recent phenomenon. As of 2001, 34 states authorized their local governments to levy sales taxes.[3] In most cases, the revenues from these local sales taxes are used for general-purpose county or municipal operations. Georgia is one of the few states in which local voters can approve a sales tax earmarked for education, specifically for the construction of school facilities and retirement of bonded debt.

Increasing reliance on unequally distributed local revenue bases runs the inherent risk of increasing inequalities in fiscal capacity across school districts. Not surprisingly, states in which a larger proportion of total revenue comes from local, rather than state, sources tend to have more unequal inter-district revenue

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[1] Leanna Stiefel, Amy Ellen Schwartz and Ross Rubenstein, "Education Finance," in *Handbook of Public Finance*, Fred Thompson and Mark T. Green (eds), New York: Marcel Dekker, Inc.: 447-482, 1998; Allan R. Odden and Lawrence O. Picus, *School Finance: A Policy Perspective*, 2nd ed., Boston, MA: McGraw Hill, 2000.

[2] The remainder of local funding came from other local governments (e.g., parent governments), charges for school lunches, tuition and transportation, and miscellaneous charges and revenues. See U.S. Bureau of the Census, Department of Commerce, "Statistical Tables: Public Elementary-Secondary Education Finances: 1998-99," Table 4.

[3] David L. Sjoquist, Sally Wallace and Barbara Edwards, "What a Tangled Web: Local Property, Income and Sales Taxes," in *Urban Issues and Public Finance: Collected Essays in Honor of Dick Netzer*, Amy Schwartz (ed), New York: Lincoln Institute of Land Policy, forthcoming.

distributions.[4] This problem may be particularly severe in states that do little to equalize revenue-raising capacity, or in which state formula grants focus only on specific tax bases. This paper examines one such case, Georgia's use of the Special Purpose Local Option Sales Tax for Education (ESPLOST). The next section provides background on the ESPLOST and state capital outlay funding in Georgia. This is followed by empirical analysis of Georgia's ESPLOST and its effects on funding equity across districts. A final section discusses policy implications for Georgia and for other states using local sales taxes to fund education.

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[4] Michele Moser and Ross Rubenstein, "The Equality of Public School District Funding in the U.S.: A National Status Report," *Public Administration Review* (2002) January/February: 63-72.

Background on Georgia School Finance

While the general purpose Local Option Sales Tax (LOST) in Georgia dates back to 1975, Special Purpose Local Option Sales Taxes for Education were not permitted until 1996.[5] The ESPLOST legislation (O.C.G.A. § 48-8-110) and subsequent constitutional amendment (Article VIII, Section VI, paragraph IV) allow local school boards to schedule a referendum on the ESPLOST. The ESPLOST rate is mandated at one cent, with a maximum period of five years. At any point during the five years, local boards of education can call for a referendum on extending the tax.

Unlike a general-purpose local option sales tax to support operations, the ESPLOST revenue can only be used for three special purposes:

1. for capital outlay, such as new educational facilities;

2. to repay bonded debt from previous educational facilities construction; or

3. to issue new bonded debt for capital outlay, to be repaid with ESPLOST revenue.

Georgia has 159 county school districts and 21 city school districts (ten of which are fiscally dependent) and ESPLOST elections are complicated by this mix. The ESPLOST is levied countywide. Therefore, in counties containing both city and county school districts, voters in both jurisdictions must approve the tax. City districts receive a pro rata share of county ESPLOST collections based on the city's share of full-time equivalent (FTE) students, unless the city and county districts negotiate an alternative sharing mechanism. Through March 2002, 165 school districts had approved the tax, two districts had voted down the ESPLOST, and 13 districts had not held votes.[6] The referendum approval rate has been 90 percent in county districts and 83 percent in city districts.[7] Table 1 lists the number and

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[5] Changhoon Jung, "Does the Local-Option Sales Tax Provide Property Tax Relief? The Georgia Case," *Public Budgeting and Finance 21* (2001): 73-86.

[6] Several districts held unsuccessful referenda followed by successful votes, and they are counted among the successful districts in this count.

[7] Georgia Department of Education, "Special Purpose Local Option Sales Tax," Atlanta, GA, 2002. Available at: http://www.doe.k12.ga.us/facilities/splost.html

TABLE 1: ESPLOST APPROVAL RATES BY LOCATION, THROUGH MARCH 2002

	Not Approved/ No vote	Approved	Total
Rural	13 (8%)	128 (92%)	141
Urban Fringe	1 (3%)	31 (97%)	32
Urban	1 (14%)	6 (86%)	7
Total	15 (9%)	165 (91%)	

TABLE 2: APPROVAL BY YEAR

Calendar Year	Number of Districts
1997	116
1998	18
1999	20
2000	6
2001	4
2002	1
No Vote/not approved	15

percentage of districts by location and enactment of the ESPLOST. The table shows that virtually all large- and mid-size urban districts have enacted the ESPLOST. A larger number of rural districts have either rejected the tax or have not scheduled a referendum, though the proportion is approximately the same as for the urban and urban fringe districts.[8] Table 2 shows that the vast majority of districts acted quickly to vote on the ESPLOST, with almost two-thirds of districts approving the tax in the first year of voting and progressively fewer districts voting on it in each subsequent year.

School operations in Georgia are funded primarily through a mix of local property tax revenue and state aid to districts. State aid takes the form of a

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[8] Location definitions come from the National Center for Education Statistics Common Core of Data. Urban districts are those in the central city of a Metropolitan Statistical Area (MSA) or Consolidated Metropolitan Statistical Area (CMSA), Urban Fringe districts are those in other areas of an MSA or CMSA, and Rural districts include those outside an MSA or CMSA

combination foundation/Guaranteed Tax Base (GTB) formula, with equalization based on each districts' property tax base. The funding formula is generally known as QBE or Quality Basic Education Act, which was first enacted in 1985 and subsequently amended several times. Per-pupil funding for the foundation program is based on the estimated costs of providing each of nineteen instructional programs. These funding categories include grade level programs, such as grades 1-3 or 9-12, and programs for students with special needs, such as special education and gifted education. The product of the number of full time equivalent students in each program times each program's funding weight produces each district's weighted FTE count, which is used as the basis for funding and wealth calculations. The weighted FTE count, therefore, includes both the number of students in each district and an estimate of the additional costs associated with various student needs and programs.[9] Districts are required to contribute the equivalent of five mills levied on their property tax base, with the state providing the difference between local revenue raised from the five mills and the estimated costs of providing the basic instructional programs. While all districts receive some funding from this portion of the formula, the proportion of funding from the state varies inversely with property tax base per weighted FTE.

The GTB operates on top of the foundation, with the state equalizing the revenue districts can raise from each mill from 5 to 20, up to the level of revenue per student that could be raised by the district at the 75th percentile of per-pupil property wealth. Participation in the GTB portion of the formula is optional and districts can choose their own tax rates, though districts above the 75th percentile cannot receive funding.[10]

Rubenstein, Doering and Gess (2000) examined the equity of operating revenues across Georgia districts from 1988 to 1996 and found relatively large

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[9] All "per-pupil" calculations in this paper use weighted FTE counts as the denominator.

[10] These descriptions encompass several substantial revisions to QBE made during the 2000 legislative session.

differences in funding across districts.[11] They report that much of the disparity in funding could be attributed to differences in student characteristics and in the cost of providing education across districts. They also found that spending differences were generally largest in the years in which state funding was lowest due to a weak economy. In a study using national data, Moser and Rubenstein ranked each state's equity based on an index combining four measures of dispersion. Georgia generally ranked in the middle of all states, improving from 24th in the nation in 1992 to 21st in 1995.[12]

While these studies shed light on the equity of Georgia's funding for school operations, they span years before the ESPLOST legislation was enacted, and do not include revenues or expenditures for capital outlay. As one of the fastest-growing states in the U.S., one of the most pressing problems facing the state has been meeting the capital outlay needs of fast-growing school districts. In addition, school reform legislation enacted in 2000 mandated reduced class sizes, thereby making space constraints even more critical. School facilities needs across the state through 2004 have been estimated at $900 million, with 5,500 to 6,700 new classrooms needed to meet the requirements of the class size reduction plan.[13] The start of the ESPLOST program, along with these capital outlay needs, makes examination of revenue sources for capital outlay in Georgia particularly relevant.

Prior to enactment of the ESPLOST legislation, Georgia school districts typically relied on a mix of debt (primarily bonds) and state capital outlay grants to fund school construction needs. Georgia law mandates that schools be well maintained and that they provide adequate space for instruction, yet does not specifically require the state to provide funding for local districts to meet these

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[11] Ross Rubenstein, Dwight R. Doering and Larry R. Gess, "The Equity of Public Education Funding in Georgia, 1988-1996," *Journal of Education Finance* 26 (2000) 2: 187-208.

[12] Moser and Rubenstein, "The Equality of Public School District Funding in the U.S.: A National Status Report."

[13] Georgia Education Reform Study Commission, "Assessing the Need," report prepared by the Education Facilities Sub-Committee, Atlanta, GA: Education Reform Study Commission, 2000.

standards.[14] The state provides funding for construction primarily through Georgia's capital outlay program. Under state law, entitlements for the regular capital outlay program cannot exceed $200 million annually. The General Assembly can provide entitlements for an additional $100 million under a separate program of "Exceptional Growth Entitlement funds."[15] Capital outlay funds are allocated to local districts based on the ratio of each district's need relative to the total statewide need. To qualify for state funding, local districts must submit local educational facilities plans to the state Department of Education, including architectural and engineering plans and prioritization of requested construction projects.

Local participation is required to receive state capital outlay funds, and the local share varies between 8 and 20 percent of "eligible" project costs. Eligible costs are defined by the state and do not encompass all costs associated with a project, such as land acquisition or construction of non-classroom facilities.[16] The state uses estimates of construction costs per square foot to determine eligible costs, but these rates are typically below actual local construction costs. Local school districts must fund the difference between actual and eligible costs.

The local share of eligible costs is determined by a "local wealth factor," which is calculated by averaging each district's property tax base and sales tax base relative to the state average for each revenue source. Districts above the state average must contribute 20 percent of eligible costs. Those below the state average must contribute a sliding percentage of costs, calculated as one-quarter of their wealth ratio, with a minimum eight percent contribution.[17] Thus, for example, a district with a wealth ratio at 40 percent of the state average would be required to contribute ten percent of eligible costs. Because the local share is capped at 20 percent of eligible costs, however, most districts contribute the same proportion of eligible costs, thereby minimizing the potential equalizing effects of the formula.[18]

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[14] Georgia Annotated Code Section 20-2-260
[15] "Exceptional Growth" districts are defined as those with at least a 1.5 percent (and at least 65 student) increase in their three-year average full time equivalent enrollment (Georgia Annotated Code Section 20-2-260 (g) (1)).
[16] Georgia Education Reform Study Commission, Assessing the Need
[17] Mary Beth Walker and David L. Sjoquist, "Allocation of State Funds for Construction and Renovation of Schools in Georgia," *Journal of Education Finance* 22 (1996): 161-179.
[18] We thank Jeffrey Williams for calling this to our attention.

Specific capital outlay formula grants target fast-growing school districts, small school districts, those engaging in consolidation and those with low wealth. The Low Wealth grants target those school districts with weak local property tax bases, weak commercial sales tax bases, and low per capita income. Specifically, districts must have less than 75 percent of the state average for property digest per FTE, sales tax wealth per FTE, and per capita income, and eligible districts must levy at least a 12-mill property tax.[19] Between the Low Wealth program's inception in 2000 through the 2003 fiscal year, twenty-eight districts received grants totaling $42.8 million. For FY 2003, thirty-eight districts were eligible for the grant; only three districts submitted applications, all of which were approved by the General Assembly.

The ESPLOST program has allowed local school districts to substantially supplant debt financing with current sales tax revenue. This change represents a dramatic shift in financing strategy for capital construction from long-term debt toward pay-as-you-go financing from current revenues or short-term bonded debt. At the same time, since most debt service was previously funded through a property tax surcharge, the ESPLOST also represents a shift from property taxes to sales taxes as the primary means for funding capital outlay.

Dayton notes that sales taxes are becoming a popular alternative to property taxes for funding education, but their increasing use raises problematic equity issues.[20] The cases *Tennessee Small School Systems v.* McWherter,[21] and *Alabama Coalition for Equity v. Hunt,*[22] in which both states' funding systems were overturned, clearly demonstrate the potential legal ramifications of reliance on local sales taxes. In both states, local school districts generated revenue through sales taxes, but state fiscal capacity equalization was based solely on property tax wealth. The Tennessee Supreme Court ruled that "(b)ecause all revenues from the property

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[19] Georgia Education Reform Study Commission, Assessing the Need.

[20] John Dayton, "Overview of School Funding Litigation in the 50 States," in U.S. Department of Education, National Center for Education Statistics, *Public School Finance Programs of the United States and Canada: 1998–99,* NCES 2001–309, Compilers: Catherine C. Sielke, John Dayton, C. Thomas Holmes, and Anne L. Jefferson. William J. Fowler, Jr., Project Officer. Washington, DC 2001.

[21] 851 S.W.2d 139; 1993 Tenn

[22] 624 So. 2d 107; 1993 Ala

tax and the local option sales tax are received by the county or city where collected, the result is the progressive exacerbation of the inequity inherent in a funding scheme based on place of collection rather than need."[23] In both states, the courts noted that rural districts would be particularly disadvantaged as they typically lack the retail shopping outlets found in urban areas. Unlike Georgia, though, both states allowed sales tax revenue to be used for school operations.

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[23] *Tennessee Small School Systems v. McWherter*

Analysis of ESPLOST Distribution Across School Districts

The ESPLOST raises a number of issues regarding the equity of educational funding in Georgia. In part, those issues relate to differences across districts that choose to levy the ESPLOST and those that do not, while other issues relate to differences in fiscal capacity across districts that do levy the tax.

Table 3 compares districts with and without the ESPLOST on a variety of descriptive statistics. Districts that approved the ESPLOST grew significantly faster than those that did not, with an average increase of over 1,300 full-time equivalent students between 1997 and 2000, compared to an average increase of 456 students.[24] Districts that did not approve the ESPLOST are also smaller on average (measured by both student enrollment and district population), have larger property tax bases and slightly lower property tax millage rates,[25] more African American and minority children, and more children eligible for free and reduced price lunch. However, these differences are not statistically significant. Average sales tax bases per FTE are virtually identical across the two groups.

Not surprisingly, sales tax bases vary considerably across Georgia, with retail sales heavily concentrated in the metro Atlanta area. In 2000, for example, the total estimated sales tax collections from a one-cent sales tax totaled over $1.3 billion for the state. Six large metro Atlanta districts (Fulton, Cobb, Atlanta City, Gwinnett, DeKalb and Clayton) accounted for over 44 percent of the total statewide base, with Gwinnett County alone accounting for nine percent of the state's total. At the same time, these counties served 33 percent of the state's students. Conversely, the 90 districts with the smallest sales tax bases accounted for less than seven percent of the statewide total while serving 13 percent of the state's students.

Local sales taxes are, of course, only one of several sources of funding for school districts in Georgia. To the extent that sales tax revenues are inversely related to property tax revenues, increasing reliance on sales taxes could help to reduce

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[24] As a percentage of average district size, districts with the SPLOST increased by an average of 12.4 percent as compared to a 6.5 percent average increase in those without the ESPLOST.
[25] Ten school districts in Georgia are permitted to levy a sales tax for school operations. For these districts, sales tax revenue for operations is combined with property tax revenue to create a total equivalent millage rate, which is included in all millage rate analyses.

TABLE 3: DIFFERENCE OF MEANS BY ESPLOST APPROVAL

	ESPLOST approved?	Mean	Std. Deviation
District Weighted FTE, 2000	No	6,960	10,048
	Yes	10,949	21,307
Total population, 1997	No	32,381	47,680
	Yes	43,587	85,356
Millage rate (School operations), 2000	No	13.40	2.17
	Yes	14.09	2.64
Property tax digest per FTE, 2000	No	108,470	57,951
	Yes	99,170	44,228
Sales tax base per FTE, 2000	No	539	266
	Yes	549	228
Change in FTE 1997-2000*	No	456	734
	Yes	1,355	3,627
Pct. free/reduced lunch eligibility, 2000	No	56.93	16.89
	Yes	52.00	19.38
Pct of students who are African American	No	42.23	26.16
	Yes	35.98	26.69
Pct of students who are minority	No	44.55	25.22
	Yes	39.04	25.52

*Significant at $p<.05$

overall funding inequities. At the same time, if the state takes steps to offset these disparities in sales tax bases, the effects of the unequal distribution will be minimized.

As a first step to explore this issue, Table 4 displays a number of univariate dispersion measures examining the distribution of revenues across all districts for 1999 and 2000. One column for each year includes all operating revenue per weighted FTE from local state and federal sources, while the second column adds potential ESPLOST revenue per FTE.[26] The table includes four measures of dispersion: the restricted range, the coefficient of variation, the Gini coefficient and the McLoone index.[27] For all except the McLoone index, lower values indicate

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[26] Potential ESPLOST revenue per FTE is estimated by multiplying the sales tax base by .01 and dividing by the district weighted FTE count. For districts that had not enacted the ESPLOST before 2000, no potential ESPLOST revenue is added.

[27] The restricted range is the difference between per-pupil revenue at the 95th percentile and the 5th percentile. The coefficient of variation the standard deviation divided by the mean. The Gini coefficient is the area between a Lorenz curve and a 45-degree line (representing prefect equality) divided by the area under the 45-degree line, representing the difference between the actual distribution of revenue and the distribution if all students received equal amounts of revenue. The McLoone index is the sum of per-pupil revenues for students at or below the median divided by

TABLE 4: UNIVARIATE DISPERSION MEASURES, 1999-2000

	1999		2000	
	Total Revenue	Total Revenue + Potential ESPLOST	Total Revenue	Total Revenue + Potential ESPLOST
Restricted Range	$1,845	$2,900	$2,076	$3,027
Coefficient of Variation	.143	.168	.148	.165
Gini Coefficient	.070	.095	.074	.080
McLoone Index	.934	.916	.944	.937

greater equity. Examining the distribution of total operating revenue (without the ESPLOST), all the measures – with the exception of the McLoone index – suggest that disparities increased somewhat between the two years.

Comparing the dispersion measures in each year for total revenue without the ESPLOST to total revenue with the ESPLOST, a clear pattern of increasing disparities emerges. Each equity measure in each year indicates larger inter-district disparities when the potential ESPLOST revenue is added to operating revenue. [28] That is, when potential ESPLOST revenues are added to operating revenues, the disparities increase in each year.

While the univariate dispersion measures suggest that the ESPLOST revenue for capital outlay clearly has the potential to exacerbate existing inequities in operating revenue from federal, state, and other local sources, they do not provide insight into the characteristics of the districts that benefit from the ESPLOST. For example, even if ESPLOST revenue increases overall funding disparities, it is important to determine whether the same districts raise more revenue from both traditional revenue sources and from the ESPLOST, and what district characteristics might be related to differences in ESPLOST revenue.

the sum of per-pupil revenues if all students below the median received the median amount. See Robert Berne and Leanna Stiefel, *The Measurement of Equity in School Finance*, Baltimore, MD: Johns Hopkins University Press, 1984, for further discussion of univariate dispersion measures ad their use in equity analyses.

[28] A higher restricted range, coefficient of variation and Gini coefficient indicate larger disparities while a lower McLoone index indicates greater disparities.

Table 5 breaks the districts into quartiles based on potential ESPLOST revenue raised per pupil in 2000, and includes districts that have not approved the tax.[29] Quartile 1 contains the districts with the highest ESPLOST revenues. The first row displays average potential ESPLOST revenues per pupil and shows that the districts in the highest quartile could raise $852 per pupil from the ESPLOST while districts in the lowest quartile can raise only $296. The second row lists district full-time equivalent (FTE) enrollment by quartile and shows a strong relationship between sales tax revenues per student and district size. The districts with the highest ESPLOST revenue average over 26,000 full-time equivalent students, as compared to only 3,400 to 7,700 students on average in the other quartiles and in districts without the ESPLOST. The average size of districts in the highest quartile is seven times that of the lowest quartile and over two and one-half times the average size for all Georgia districts (10,440 FTE students). These larger districts are also much faster-growing than those in the lower quartiles in both absolute and relative terms. The districts in the first quartile grew by an average of over 13 percent (3,541 weighted FTE students) between 1997 and 2000, while those in the lowest quartile grew by only 7 percent (238 weighted FTE students).[30]

Similarly, the districts with the largest sales tax base per weighted FTE average substantially larger property tax bases per pupil. The average property tax base per pupil in the highest quartile is over twice that in the lowest quartile, indicating that these districts could raise twice as much ($71 per pupil) as the lower quartile districts for each property tax mill levied.[31] Interestingly, districts in the top quartile of ESPLOST revenue also levy the highest millage rates on average, suggesting that, despite higher property and sales tax wealth, these districts also tend to exert more tax effort than do lower wealth districts.[32] Districts in the upper quartile

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[29] Sensitivity analysis using quintiles yields substantially similar results.

[30] Average growth rates in the second and third quartiles were 12 percent and 11 percent respectively.

[31] Thus, for example, if districts at each quartile's average levied exactly 15 mills, the difference in property tax revenue would be approximately $1,000 per pupil.

[32] The Pearson correlation between ESPLOST revenue and millage rate is .21, which also supports the conclusion that higher wealth districts tend to have higher tax rates.

TABLE 5: SAMPLE MEANS BY QUARTILE OF ESPLOST REVENUE PER WEIGHTED FTE, 2000

	No Splost (n=23)	Quartile 1 (n= 40)	Quartile 2 (n= 39)	Quartile 3 (n=39)	Quartile 4 (n=39)
Potential SPLOST revenue per FTE	$ 539	$ 852	$ 602	$ 436	$ 296
Weighted FTE	6,960	26,390	7,740	5,828	3,443
Change in Weighted FTE, 97-00	457	3,541	927	657	238
Property Tax Base Per FTE	$ 108,471	$ 141,490	$ 100,147	$ 93,561	$ 70,395
Local Revenue Per FTE	$ 1,460	$ 1,992	$ 1,415	$ 1,169	$ 965
State Revenue Per FTE	$ 3,006	$ 2,538	$ 2,966	$ 3,147	$ 3,229
Federal Revenue Per FTE	$ 358	$ 278	$ 314	$ 382	$ 404
Total Rev Per FTE (without sales tax)	$ 4,823	$ 4,809	$ 4,694	$ 4,697	$ 4,598
Total Rev Per FTE (With ESPLOST)	$ -	$ 5,660	$ 5,297	$ 5,133	$ 4,894
School operations millage rate	13.40	14.94	13.90	14.01	13.48
Average Capital outlay grants per FTE (98-00)	$ 46	$ 91	$ 74	$ 65	$ 75
Pct. African American	42.2	35.7	31.7	37.5	39.0
Pct. Minority	44.6	42.0	33.7	39.5	40.1
Pct. Free lunch eligible	56.9	46.1	49.1	54.1	58.9

also have lower proportions of students from low-income families (as indicated by free lunch eligibility) but slightly higher proportions of African American and minority students.

As might be expected, given the differences in property tax base and rates, districts in the higher quartiles also average substantially higher local revenues per pupil, with districts in the highest quartile averaging slightly over twice that in the lowest quartile ($1,992 to $965).[33] Conversely, districts in the lower quartiles receive higher state revenues per pupil due to their lower property tax base, and higher federal aid, likely due to their higher proportions of free-lunch eligible pupils.

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[33] Local revenues consist primarily of local property taxes. Ten counties in the state are permitted to levy sales taxes to fund school operations, and this revenue would be included in their local revenues. All miscellaneous local revenue sources for school operations are also included in this number.

Examining total operating revenues per pupil from federal, state, and local sources (excluding ESPLOST), Table 5 suggests that districts with higher ESPLOST revenues also tend to have slightly higher total operating revenues per pupil, though the differences are rather small (for example, a difference of $211 per pupil across the highest and lowest quartiles). Examining the next row, which adds in the ESPLOST revenue, the disparities increase to approximately $750 per FTE between the first and fourth quartile.

As described earlier, concern over differences in sales tax base may be minimized by state efforts to offset differences in fiscal capacity. For example, Table 5 demonstrates that state operating funds in Georgia are distributed in inverse relation to property tax base. Since ESPLOST revenue is earmarked for capital outlay and debt retirement, state capital outlay grants are the primary means available to offset disparities in ESPLOST revenue. To assess the relationship between capital outlay funding and ESPLOST revenue, Table 5 displays average capital outlay grants per pupil by quartile for 1998-2000.[34] The pattern suggests that capital outlay grants are not concentrated in districts with the lowest ESPLOST revenue. Grants per-pupil are very similar across the bottom three quartiles, but higher in the upper quartile. The Pearson correlation between capital outlay grants and ESPLOST revenue is small and not statistically significant, but the quartile analysis indicates that districts with the largest fiscal capacity (as indicated by higher sales and property tax bases) received somewhat higher capital outlay grants on average. At the same time, districts without the ESPLOST have substantially lower capital outlay funding than do those with the ESPLOST, suggesting that these districts may be falling behind the rest of the state in both state funding and locally-raised revenue for capital outlay.

These breakdowns of funding by source clearly suggest that the ESPLOST increases revenue disparities across districts in Georgia. Overall, disparities have increased since the ESPLOST legislation was enacted. Moreover, districts with greater local fiscal capacity from the property tax tend to also have larger sales tax bases on which to draw. The measures of local revenue capacity used by the state to

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[34] Since capital outlay funding is "lumpy" the grant variable is specified as the three-year average of per-pupil grants (Capital outlay grants per pupil = Sum of capital outlay grants 1998-2000/Sum of FTE 1998-2000).

distribute capital outlay grants did not include a measure of sales tax wealth in the period under examination (sales tax wealth was added to the formula beginning in FY 2003), and the distribution of grants between 1998 and 2000 does not appear to be heavily targeted to districts with lower sales tax wealth. Since property tax base per pupil and sales tax base per pupil are positively and strongly correlated ($r = .67$, $p<.01$), the ESPLOST tends to provide disproportionate additional revenue to already higher revenue districts, thereby increasing disparities across districts. Moreover, state capital outlay formulas that provide additional grants to fast-growing districts may tend to concentrate additional revenues on the larger, relatively wealthier districts in the metro Atlanta area.

In large part, these disparities tend to be associated with district location, particularly in an urban or rural area. In 2000, all seven urban districts and almost half (15 of 32) of urban fringe districts in Georgia are in the top quartile of sales tax revenue (Table 6). Conversely, only 16 percent of the rural districts are in the top quartile and almost 60 percent are in the bottom two quartiles. Urban and urban fringe districts represent almost half of the districts in the highest revenue quartile, though they comprise less than one-quarter of the total districts in Georgia. Table 7 shows a similar pattern for property tax base per pupil. Even on a per pupil basis, the large urban school districts in Georgia have more tax resources on which to draw, and the differences are particularly pronounced when sales tax resources are added to property tax revenues.

TABLE 6: 2000 SALES TAX BASE BY QUARTILE AND LOCATION

	Urban	Urban Fringe	Rural	Total
1	7	15	23	45
2	0	9	36	45
3	0	8	37	45
4	0	0	45	45
Total	7	32	141	180

TABLE 7: 2000 PROPERTY TAX BASE BY QUARTILE AND LOCATION

	Urban	Urban Fringe	Rural	Total
1	4	12	29	45
2	3	10	32	45
3	0	8	37	45
4	0	2	43	45
Total	7	32	141	180

Conclusions and Policy Implications

Georgia's ESPLOST legislation provided school districts a unique opportunity to substitute sales tax-funded, pay-as-you-go construction for property tax-funded, long-term debt service. While the ESPLOST has provided a windfall for many school districts – particularly large, fast-growing districts in metro Atlanta – many other school districts have been largely left behind. This pattern is not entirely unexpected, since retail sales outlets tend to concentrate in heavily populated urban and suburban areas. The differences in sales tax base appear to exacerbate already existing inequities in the property tax base, which serves as the primary local revenue source for school districts in Georgia. And while Georgia offsets some differences in local property tax revenues by distributing operating aid in inverse relationship to property tax base, the state does little to equalize differences in sales tax capacity (or property tax wealth) through its capital outlay formulas.

These analyses raise a number of policy issues for Georgia and for other states considering similar expansion in the use of local sales taxes to fund education. First, to the extent that districts with larger sales tax bases also have greater capacity to raise other revenues for education, introduction of local sales taxes are likely to increase already existing differences in local fiscal capacity. Though this study focuses on Georgia, the state is not unique in having retail sales concentrated in its major metropolitan area, an area that also has relatively high property wealth. Few rural areas, except those with large malls or retail outlets, are likely to have a sales tax base large enough to raise substantial revenue from a local sales tax. In rural areas with large retail outlets, it is likely that a large proportion of sales come from residents of surrounding school districts, thereby forcing non-residents to support educational expenditures in the district with the concentration of retail establishments.

Second, unless state funding formulas explicitly account for sales tax base in distributing aid, they are unlikely to overcome the revenue disparities caused by differences in local tax bases. In Georgia, property wealth is used as the primary measure of local fiscal capacity since it is virtually the only local revenue source available to fund operations. Capital outlay grants recently began to use sales tax

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wealth to determine the local share of eligible construction projects, but it remains only one piece of the local wealth calculation. ESPLOST revenue far exceeds state capital outlay funding, therefore the grants could not offset disparities even if they were concentrated entirely in the lowest wealth districts. Moreover, since not all districts choose to levy the ESPLOST, incorporating sales tax wealth into the formula would require an explicit policy decision as to whether *actual* sales tax revenue or *potential* sales tax revenue is the most appropriate measure of local sales tax wealth. An additional complicating factor in Georgia's grant formulas is that the state provides additional capital outlay funding to fast-growing districts, and these districts tend to be urban and suburban districts with relatively large property and sales tax bases on which to draw.

Finally, though this study does not explicitly examine these issues, it is well established in the public finance literature that general sales taxes tend to be regressive and unstable revenue sources.[35] Since lower-income families will tend to spend a higher proportion of their income on items subject to the sales tax, they will bear a disproportionate share of the burden from a sales tax increase, such as the ESPLOST.[36] To the extent that these families also receive greater benefits from the school construction or property tax relief funded through the ESPLOST, this regressivity may be mitigated. However, the incidence of these benefits is far from clear. The size of a district's sales tax base is also much more volatile and difficult to forecast than its property tax base. The Georgia General Assembly granted school districts the authority to levy the ESPLOST during a time of strong economic growth and generally increasing sales tax revenues statewide. As the economy weakens and sales tax revenues decline, districts could face difficulty in meeting their expenditure needs if ESPLOST revenue forecasts were based entirely on data from the economic boom.

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[35] Harvey S. Rosen, *Public Finance*, 5th ed., Boston, MA McGraw Hill, 1999.
[36] Food is exempt from state sales tax in Georgia, but not from local sales tax.

A caveat worth noting, though, is that this study examines only the revenue-side implications of the ESPLOST. It is quite possible that rural districts, particularly those that are not growing, have fewer capital outlay needs than do faster-growing urban and suburban districts. Districts without large capital outlay needs may be unlikely to enact the ESPLOST. If so, then the revenue disparities may be of less concern to policymakers since both rural and urban districts may have sufficient revenue to meet their expenditure needs. The adequacy of funding requires further examination, however, since local construction costs typically exceed state-defined "eligible" costs.

It is not surprising that a state facing expenditure pressure caused by high-growth and greater educational performance demands would seek ways to supplement its revenue base by turning to new local revenue sources. In enacting the Special Purpose Local Option Sales Tax for Education, Georgia sought not only to provide school districts with an additional source of construction funding, but to also preserve local control by requiring local voter approval of the tax. In allowing districts to tap an unequally distributed revenue base without explicitly offsetting this inequality in state funding formulas, though, the state may be inadvertently helping to increase inequities across districts in Georgia. Further attention to offsetting these disparities through operating and capital outlay grants, particularly targeted on rural areas of the state, could help to reduce future inequities before they become further entrenched.

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