

# RESEARCH NOTE

## School Budget Vote Failures: Risk Factors

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Fiscal Analysis and Research Unit

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## School Budget Vote Failures: Risk Factors

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### ABSTRACT

This research note identifies factors associated with school district budget vote failures in New York State. Regression analysis using school budget vote results from May 2004 and data from the School District Property Tax Report Card and the *School District Fiscal Profiles* suggests that the percentage increase in the tax levy is a good predictor of voting results. The greater the year-to-year percentage increase in the proposed tax levy, the greater the predicted percentage of voters rejecting the school budget in the initial vote in May. Whether or not a district was located in Long Island (Nassau and Suffolk counties) was also a powerful and statistically significant predictor. Higher levels of local tax effort to support education and greater district size (in terms of the number of pupils) were also associated with a greater proportion of "no" votes within a district, but the size of those effects was rather small. Together all of the predictors accounted for approximately a third of the variance in the percentage voting "no."

The extent to which these results are generalizable is unclear. It is probable that the broad economic climate at the time of the election influences voter behavior as do decisions made at the local level regarding school programs, policies, curricula, and capital asset management. Nevertheless the findings here suggest that school district officials and school board members would be wise to take the risk factors identified by the analysis into account as they prepare budgets and present information to voters.

Further research is needed to better understand some of the causal relationships at work—particularly the reasons for the relatively high levels of voter dissatisfaction on Long Island.

### BACKGROUND: SCHOOL BUDGET VOTES IN NEW YORK STATE

This research note presents an analysis of school budget vote results from May 2004. In most New York State school districts voters exercise their franchise directly by either adopting or rejecting school budgets. The most notable exceptions are the Big Five City School Districts (Buffalo, New York City, Rochester, Syracuse, and Yonkers), which are "fiscally dependent" on their municipal governments to provide local funds for education.

In the non-fiscally dependent districts, the initial votes are held in May. If voters reject a district's budget, the district can either hold a second vote (for the same budget or a revised budget) or adopt a contingency budget, which limits spending categories and caps spending increases at either 20 percent above the inflation rate (120 percent of the national consumer price index) or four percent, whichever is less. If voters reject the budget twice, the district automatically adopts a contingency budget. Certain

expenditures are exempt from the contingency budget cap, among them costs associated with enrollment increases, capital expenditures that have previously been approved by voters, and emergency expenditures necessary due to damage or destruction of a school building or school equipment. Districts operating under contingency budgets must nonetheless honor collective bargaining agreements.

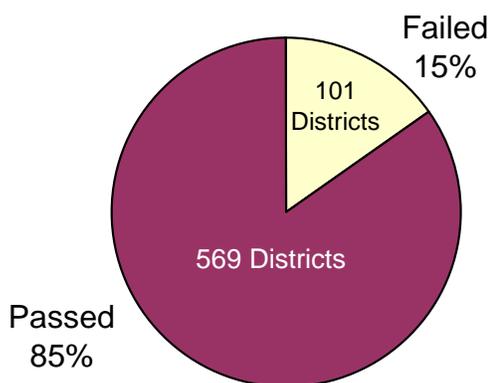
## STATEWIDE RESULTS, 2004

As Figure 1 shows, 15 percent of school budgets voted on in May 2004 failed (101 of 670).<sup>1</sup> The previous year, only 6 percent failed. Over a quarter of the districts that had a budget failure in the initial budget vote in 2003 also had one in 2004: Central Islip (Suffolk), Chester (Orange), Cornwall (Orange), Dunkirk City (Chautauqua), Fredonia (Chautauqua), Lawrence (Nassau), Manhasset (Nassau), New Hyde Park (Nassau), St. Regis Falls (Franklin), Westbury (Nassau), and Whitney Point (Broome).

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Figure 1.

School District Budget Vote Results, May 2004 (Initial Vote)



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<sup>1</sup> The Big Five City school districts do not hold school budget votes and so were excluded from the analysis. Several recently consolidated districts were also excluded from the analysis: Canisteo and Greenwood, and South Manor and Eastport (as well as Eastport-South Manor). This means that this analysis includes 670 school districts, rather than the 680 "major districts" that appear in the *Fiscal Profiles* data set. The budget vote results are available at: <http://www.emsc.nysed.gov/mgtserv/BudgetVotes/AnnualVoteResultsTable.htm>.

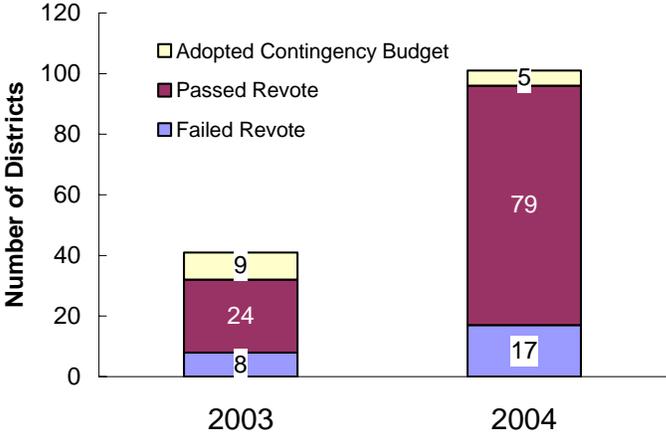
**Revote Results**

In both 2003 and 2004 the majority of school boards in those districts whose budgets failed in May opted to hold a revote. The majority of these revoted budgets passed. (See Figure 2.)

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Figure 2.  
Outcome of Budget Vote Failures, 2003 and 2004

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In 2003, 41 percent of the districts with failed budgets ended up adopting a contingency budget, either by forgoing a revote or by experiencing a defeat on the revote. In 2004, 22 percent of the districts with failed budgets (roughly three percent of all districts) ended up adopting contingency budgets.

**STATEWIDE BUDGET ADOPTION RATE, 1969-2004**

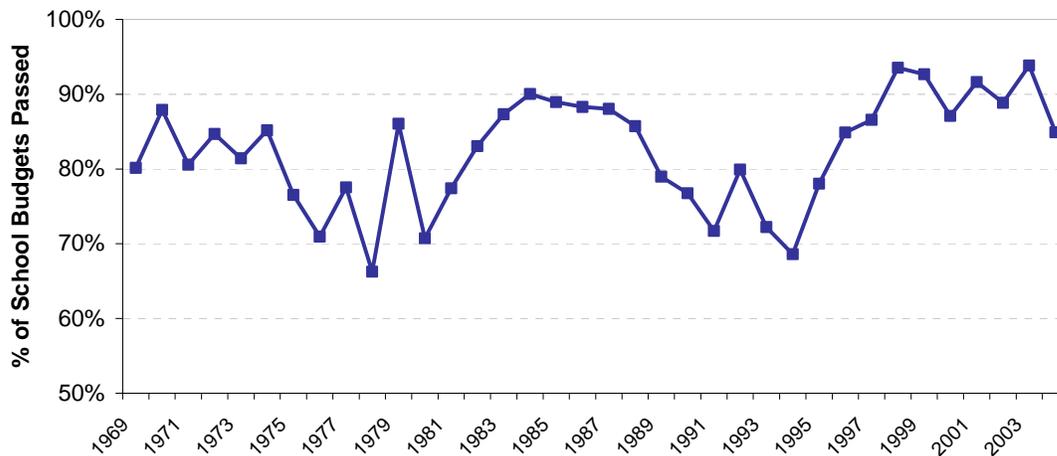
A review of past budget adoption trends helps us determine whether or not the increase in budget failures from 2003 to 2004 is an anomaly. Figure 3 shows that the percentage of school districts whose budgets are adopted in the initial vote varies substantially from year to year. Over the period from 1969 to 2004 the lowest approval rate was 66 percent in 1978, while the highest was 94 percent in 1998 and 2003. Viewed in this light, the drop in budget approvals from 2003 to 2004 appears unremarkable.

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Figure 3.

Percentage of School Budgets Adopted on Initial Vote (1969-2004)

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Note: Data available online at: <http://www.emsc.nysed.gov/mgtserv/bvhist.htm>.

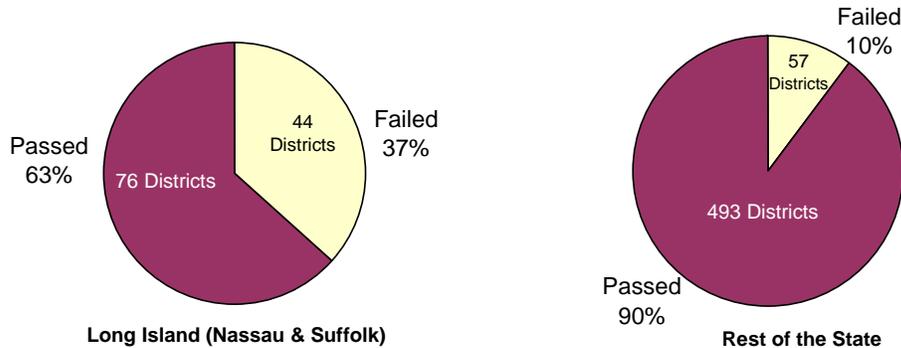
It is possible, even probable, that broad economic forces such as labor market conditions and federal fiscal policy (including its effect on interest rates and inflation) influence budget vote outcomes. Appendix A contains a chart displaying the percentage of school budgets passed on the initial vote from 1969 to 2004 along with the inflation rate for each year. On the whole, it appears that a greater proportion of districts pass their budgets during periods of low inflation, although the mid-1970s and the early 1990s were characterized by both falling inflation rates and increasing budget failures.

### **LONG ISLAND EXPERIENCED A DISPROPORTIONATE NUMBER OF BUDGET VOTE FAILURES IN 2004**

Although only 18 percent (120 of 670) of the school districts in this study are located in Nassau or Suffolk counties, these districts account for 44 percent of the school budget failures in May 2004 (44 of 101). Put another way, 37 percent of the school budgets in Long Island failed in the initial vote, while only ten percent failed in the rest of the State. (See Figure 4.)

Figure 4.

School District Initial Budget Vote Results: Long Island Compared to the Rest of the State (May 2004)



Comparing the average percentage of voters rejecting the budget in Long Island districts to the percentage voting "no" in districts in the rest of the State reveals a ten percentage point difference. As Table 1 shows, in the initial vote the average percentage voting against the budget in Long Island districts was 46 percent, while the comparison figure for the rest of the State was only 37 percent.

Table 1.  
Average Percentage Voting "No," May 2004  
(Initial Vote, District Averages)

	Avg. % Voting "No"	Standard Deviation
Long Island Districts	46.2%	10.1%
Rest of State	37.0%	10.5%
<b>Overall</b>	<b>38.6%</b>	<b>11.0%</b>

## UNDERSTANDING VOTER BEHAVIOR

### *Information Distributed to Voters*

Each year, no later than 24 days before the statewide school budget vote, districts must submit their Property Tax Report Card to the State Education Department.

The Property Tax Report Card contains the total spending level (budget), the local tax levy amount, and enrollment figures for the current budget year as well as estimates of the same items for the upcoming budget year. The report card also shows the percentage change from the current year to the upcoming year for the expected spending and tax levy figures and provides the national inflation rate (the year-to-year percentage change in the national Consumer Price Index (CPI)) as a point of comparison.<sup>2</sup>

By law, voters receive much of this information (notably the adopted current-year budget, the proposed budget, the percentage change in the budget, the CPI, and the estimated property tax levy for the upcoming year) by mail before the budget vote. In addition, districts must send voters information breaking down the current year, proposed, and contingency budgets into administrative, program, and capital components as well as figures showing the effect of STAR on property tax bills. (STAR is a State program offering tax relief to homeowners by exempting part of the assessed value of owner-occupied homes from the school property tax.)

It is important to keep in mind that the data in the Property Tax Report Cards are not audited. Moreover, the proposed budget figures are estimates, and since State budgets are often passed late—usually well after school districts must prepare budgets—districts must guess how much State Aid they will receive (and thus what the local tax levy should be). The State fiscal year begins on April first, so even if the State budget were adopted on time, school districts would have to rush to prepare their own budget materials to be presented to voters in time for a May vote. As it is, with no State budget passed until well into the summer (as is often the case), districts must continue to plan and hire with no reliable information on their level of State funding. This means that the proposed spending and tax levy figures in Property Tax Report Card are best guesses rather than accurate measures of future spending and tax levy levels (which is why SED does not use the Property Tax Report Card to study fiscal trends or local effort). Since the purpose of this report, however, is to study voter behavior and the Property Tax Report Card contains the key information that districts present to voters, it makes sense to look for evidence that the information influences voter behavior.

## **WHY SCHOOL BUDGETS FAIL**

### ***Factors Associated with Budget Failures***

The associations between pairs of selected variables from the School Property Tax Report Card, the school budget vote results, and data from the most recent *School District Fiscal Profiles* (which contains data from 2002-03) were measured by calculating their bivariate correlations.<sup>3</sup> The Pearson correlation coefficient,  $r$ , indicates

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<sup>2</sup> The Property Tax Report Card data for 2004 are available online at: [http://stateaid.nysed.gov/prop\\_04.htm](http://stateaid.nysed.gov/prop_04.htm). The data appear to be updated on a rolling basis, which means that some of the figures may not match exactly those sent to voters in preparation for the May 2004 budget vote.

<sup>3</sup> The *Fiscal Profiles* data and an appendix including definitions of variables and data sources are available online at, [http://www.oms.nysed.gov/faru/Profiles/profiles\\_cover.htm](http://www.oms.nysed.gov/faru/Profiles/profiles_cover.htm).

the strength and direction of the linear association between any two interval-scale variables. The value of  $r$  ranges from -1 to 1. The further from zero the value of  $r$ , the stronger the relationship between the two variables and the better our ability to predict statistically the value of one variable, given knowledge of the other. If  $r$  is positive, then higher levels of one variable are associated with higher levels of the other; if  $r$  is negative, then higher levels of one variable are associated with lower levels of the other. Appendix B contains Pearson correlation coefficients for a number of variables measuring voter behavior, district fiscal capacity, district budget choices, and demographic characteristics. District size (number of pupils), the share of revenues that come from local sources, the local effective tax rate, the year-to-year percentage change in the tax levy, and the year-to-year percentage change in district spending are all positively correlated with the percentage voting "no" in the initial budget vote. The percentage of students in poverty is negatively correlated with the percentage voting "no."

Appendix C contains a scatterplot that graphically depicts the positive association between the percentage tax levy increase and the percentage of voters rejecting the school budget. The bivariate correlation suggests that growth in spending and proposed tax levies is associated with a greater proportion of "no" votes. The R-square value of .215 indicates that 21.5 percent of the variance in the percentage voting "no" can be explained by the year-to-year percentage increase in the proposed tax levy. The ordinary least squares regression equation for this bivariate relationship indicates that for every one percentage point increase in the tax levy, the percentage of "no" voters increases by 1.256 percentage points. Since the constant term is 0.280 (or 28 percent), this regression equation results in a predicted budget failure at a tax levy increase of 17.5 percent. In other words, using this regression model, which assumes that the only predictor variable for budget vote results is the percentage increase in the tax levy, the predicted percentage voting "no" reaches 50 percent when the proposed tax levy increase is 17.5 percent.

### ***Factors Not Associated with Budget Failures***

It seems possible that districts' fiscal capacity could influence voter behavior, or that there might be a relationship between the share of school funding that comes from local revenues (rather than State or federal sources) and voter behavior. Analysis of the most recent *Fiscal Profiles* data (from 2002-03), however, revealed little evidence that either the level of actual value per pupil or income per pupil was strongly associated with voter behavior. The share of total revenues that comes from local sources is modestly and positively associated with a greater percentage of "no" votes ( $r=.14$ ,  $p<.01$ ).

Fiscal stress does not appear to be associated with budget failures. The rate of budget failures among districts in fiscal stress (as identified by the State Education Department) was comparable to the rate for the State as a whole. This study did not examine actual value per household or income per tax return, which might provide better measures of voters' ability to pay for education than the actual value per pupil and income per pupil measures. The study also did not examine changes over time in property values or income.

**Risk Factors for Budget Vote Failure: Tax Levy Increases, Local Effort Rate, District Size (Enrollment), and District Location**

At the bivariate level, as seen in the correlation matrix displayed in Appendix B, there are several other variables that correlate with budget vote outcomes in expected ways. These include the local effort rate ( $r=0.11$ ), district size (number of pupils) ( $r=0.25$ ), and whether the district is located in Long Island. All of these variables are good predictors of voter behavior. When these predictor variables plus the percentage increase in the proposed tax levy ( $r=.46$ ) are incorporated in a multivariate regression analysis, together they account for over a third of the variance in the percentage of voters rejecting the budget proposal on the initial vote. (See Table 2.)

Table 2.  
Regression Model: Predictors of Voting Behavior  
(Dependent Variable is % Voting "No")

	Adjusted R-Square	Unstandardized Coefficient		Standardized Coefficient	t	Sig.
		B	St. Error	Beta		
<b>Model</b>	.339					
Constant		.181	.017		10.841	.000
% Change in Tax Levy, 2003-04 to 2004-05		1.217	.087	.451	14.052	.000
Long Island Factor (1=Long Island District; 0=Other District)		.07618	.010	.266	7.816	.000
Pupil Count (DCAADM), in Thousands		.004983	.000	.109	3.134	.002
Local Effort Rate		.004394	.001	.182	5.326	.000

**Interpreting the Effect of the Risk Factors**

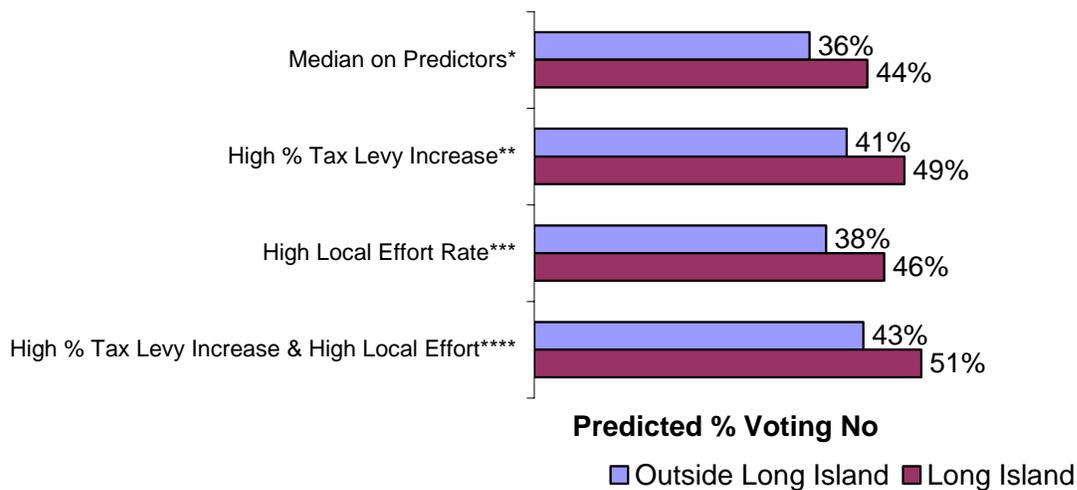
Basically, the regression analysis indicates that for every one percentage point increase in the proposed tax levy, the percentage voting "no" increases by 1.2 percentage points. This "tax levy effect" is substantially larger than any other measure (Beta=0.45) — almost twice as large as the next most important effect. However, districts with more pupils and higher local effort rates are also at greater risk of budget failure. Even after controlling for district size (pupils) and local effort, districts in Long Island tend to face more resistance from voters than districts in the rest of the State.

Table 2 shows that all of the predictors are statistically significant. But how strong are their effects? Using the regression equation and selected values of the predictor variables helps us understand the risks of budget failure. Figure 5 displays the predicted percentage voting "no" using eight different combinations of values for the predictor variables. The darker bars (the lower bars in each pair) show the predicted

values for a hypothetical Long Island district, while the lighter bars (the upper bars in each pair) show the predicted values for a hypothetical district in the rest of the State.

**Figure 5.**  
**Predicted Budget Vote Results Based on Regression Model Results**  
**Using Various Values of Predictor Variables**

(Predictor Variables are % Tax Levy Increase, Local Effort Rate, Number of Pupils, and whether or not the District is Located in Long Island)



\* Independent variables set near statewide medians: Percentage change in tax levy = 8, pupil count (DCAADM) = 1,700, local effort rate = \$17.00 per thousand actual value.

\*\* Percentage increase in tax levy set at 12 (roughly one standard deviation above the median), DCAADM = 1,700, local effort rate = \$17.00 per thousand actual value.

\*\*\* Percentage increase in tax levy set at 8, DCAADM = 1,700, local effort rate = \$22.00 per thousand actual value (roughly one standard deviation above the statewide median).

\*\*\*\* Percentage increase in tax levy set at 12 (roughly one standard deviation above the median), DCAADM = 1,700, local effort rate = \$22.00 per thousand actual value (roughly one standard deviation above the statewide median).

The top pair of bars shows what the model predicts for districts with a proposed tax levy increase, local effort rate, and size that are set close to the statewide medians for all districts. The model predicts that in a Long Island district with those values 44 percent of voters would reject its budget proposal while in a district elsewhere in the State only 36 percent of voters would reject the budget. The second set of bars shows what the model predicts for hypothetical districts with a high percentage tax levy increase (roughly one standard deviation above the statewide median) with other variables set near the median. In this case, the predicted "no" vote for a Long Island district would be 49 percent, while it would be only 41 percent for a district elsewhere in

the State. The third set of bars shows that the local effort rate has a more modest effect on the percentage voting "no" than the percentage increase in the tax levy. The final set of bars shows what we would expect for districts with both a high local effort rate and a high percentage tax levy increase (both set at roughly one standard deviation above the statewide median). In this scenario, the model predicts that a hypothetical Long Island district would fail its budget with 51 percent voting "no," while the predicted "no" vote for a district elsewhere in the State would be only 43 percent.

In short, the figure shows that for districts outside of Long Island even high tax levy increases and high local effort rates do not result in a predicted budget failure. The model predicts that a hypothetical district outside of Long Island with 1,700 pupils, a local effort rate of \$22.00 per thousand actual value, and a proposed tax levy increase of 12 percent would pass its budget by a vote of 57 percent to 43 percent. This indicates that these factors do not suffice to predict or explain budget failures. At the same time, district officials and school board members should note the potential risks of large tax levy increases. Officials and board members in large districts should also be aware that, other things being equal, they are likely to face somewhat greater resistance from voters than their counterparts in smaller districts. District officials and school board members in Long Island should be aware that their risk of budget failure appears to be greater than the risk in other parts of the State at any given level of proposed percentage tax levy increase, local effort rate, and district size.

As for the causal links between the risk factors and voting behavior, the effect of the increase in tax levy is readily understandable. It is easy to see how support for school budgets would decrease proportionately as tax levy increases surpass the inflation rate. The effect of the local effort rate also makes intuitive sense. Voters in districts whose local revenues devoted to education are relatively high with respect to the property tax base may feel that their tax burden is heavy and so resist increasing it. Understanding the causal relationship between district size and budget votes poses a greater challenge. It may be that greater enrollments lead to greater administrative complexity, more time- and labor-intensive planning processes, and more conflict among a larger number of stakeholders wishing to influence decision-making and that these characteristics can foster voter discontent. (But that is all speculation.) It is unclear why the risk of budget vote failures is so much higher in Long Island than in the rest of the State.

### ***Long Island Districts and Other Districts: Some Comparisons***

Although the causes of the disproportionate voter resistance to school budget proposals made by Long Island districts remain elusive, the *Fiscal Profiles* data does allow for some descriptive analysis that shows how Long Island districts as a group differ from districts in the rest of the State.

Table 3 compares means, medians, and standard deviations on selected variables for Long Island districts to those for districts in the rest of the State (excluding the Big Five Cities and a few consolidated districts). Long Island districts tend to be not only larger (in terms of enrollments), but they also tend to be wealthier and spend more per pupil on average than districts elsewhere in the State. As we would expect, given their greater wealth, their average local share of education

expenditures is much higher than the average for the rest of the State. The median local effort rate (an implied millage rate) for Long Island districts, however, is lower than the median for the rest of the State. Because of very high property values, Long Island districts are able to raise large amounts of money per pupil at relatively low millage rates.

Table 3.

Mean Values of Selected Variables in Long Island and the Rest of the State by Budget Vote Result

	Failed			Passed			Overall		
	Mean	Median	St. Dev.	Mean	Median	St. Dev.	Mean	Median	St. Dev.
<b>Long Island (44 of 120 Failed: 37%)</b>									
Actual Value/Pupil (Weighted)	\$503,745	\$356,570	\$492,135	\$1,067,599	\$453,938	\$1,874,165	\$860,852	\$398,076	\$1,541,339
Income/Pupil (Weighted)	\$171,917	\$127,617	\$117,038	\$184,143	\$145,412	\$128,313	\$179,660	\$144,206	\$123,941
Expenditures/Pupil	\$15,701	\$15,124	\$3,231	\$16,993	\$15,257	\$6,453	\$16,519	\$15,201	\$5,514
Pupils (DCAADM)	4,419	3,608	2,830	3,641	2,935	3,117	3,927	3,227	3,027
Local Effort Rate	\$17.84	\$18.49	\$5.97	\$14.82	\$16.13	\$6.33	\$15.93	\$16.69	\$6.35
Local Share of Total Revenues	0.657	0.659	0.154	0.711	0.744	0.177	0.691	0.698	0.170
<b>Rest of the State (57 of 550 Failed: 10%)</b>									
Actual Value/Pupil (Weighted)	\$235,106	\$163,605	\$266,463	\$274,610	\$186,424	\$279,022	\$270,516	\$184,515	\$277,774
Income/Pupil (Weighted)	\$80,774	\$67,127	\$65,807	\$89,936	\$68,211	\$68,678	\$88,986	\$68,005	\$68,385
Expenditures/Pupil	\$12,508	\$11,852	\$2,312	\$13,020	\$12,107	\$4,063	\$12,967	\$12,088	\$3,919
Pupils (DCAADM)	2,374	2,041	2,259	2,181	1,414	2,114	2,201	1,438	2,128
Local Effort Rate	\$17.96	\$18.09	\$3.90	\$17.57	\$17.35	\$4.02	\$17.61	\$17.41	\$4.01
Local Share of Total Revenues	0.379	0.333	0.179	0.414	0.375	0.195	0.410	0.367	0.193

Source: Data from the *Fiscal Profiles Masterfile, 2002-03*; available online at [http://www.oms.nysed.gov/faru/Profiles/profiles\\_cover.htm](http://www.oms.nysed.gov/faru/Profiles/profiles_cover.htm).

Table 3 further disaggregates the data by showing the averages and medians for districts within each group that passed and failed their budgets on the initial budget vote in May 2004. On the whole, within each of the two geographic groups, districts that experienced budget failures were larger, had somewhat higher local effort rates, and were somewhat less wealthy than those whose voters adopted budgets.

Factors potentially at work in Long Island that are not captured in the data used in this study include the overall local tax burden (not just the portion used to support schools), changes in property values relative to income, changing demographics, and organized efforts to reduce growth in taxes and/or limit spending.

It is also notable that fiscal oversight of districts throughout the State, but especially in Long Island, is strengthening in the wake of revelations of fiscal mismanagement and wrongdoing in the Roslyn and William Floyd districts. In August 2004, the State Comptroller announced plans to conduct in-depth audits of four Long Island districts and audits of administrative costs in another 15 Long Island districts. Pending the results of the audits, of course, it is impossible to pass judgment on the districts' financial operations. However, the districts were selected in part based on requests from concerned parents and local officials.<sup>4</sup> Of the 19 districts chosen for

<sup>4</sup> "Hevesi Announces Six Additional School Districts to be Audited for Administrative Costs," Press Release, August 25, 2004, accessed online at: <http://www.osc.state.ny.us/press/releases/aug04/082504.htm>.

audits in August, ten experienced budget failures in May 2004. It seems possible, then, that a lack of public confidence in the fiscal controls and financial operations in certain districts is contributing to voter dissatisfaction in those districts.

## **POLICY IMPLICATIONS**

The best predictor of voter opposition to school budgets is the percentage increase in the tax levy. It is an even better predictor than the percentage increase in spending. Nevertheless, in many districts voters approve budgets despite large tax levy increases. The key to winning voter approval may be for districts to help voters understand what they are getting for their money. School Board members and district officials in districts with high local effort rates and relatively high enrollments should pay considerable attention to their communication and voter outreach efforts. In Long Island this is especially important because the risk of budget failure appears to be greater than elsewhere.

## **SOME CAVEATS**

This study covers only one year. Because macroeconomic effects (inflation rates, employment rates, income trends, etc.) probably influence voter behavior, the results are not necessarily generalizable to other times and places.

Also, the percentage increase in tax levy for a district does not tell us much about changes in the tax burden on individual voters in that district. Differential changes in property values within districts can shift the tax burden among voters in complex ways. The ability of districts to tax several types of property further complicates matters. The value of commercial property and vacation homes owned by people whose primary residence is outside the district can strengthen a district's tax base and reduce the tax burden on its voters.

## **QUESTIONS FOR FURTHER RESEARCH**

The relationship between fiscal capacity and voter behavior deserves further attention. Using household-level measures might reflect voter behavior better than per pupil measures. Studying changes in the tax base would also be worthwhile. Rapidly changing property values and income levels in certain areas of the State may help account for lower levels of support for school budgets in districts in those areas.

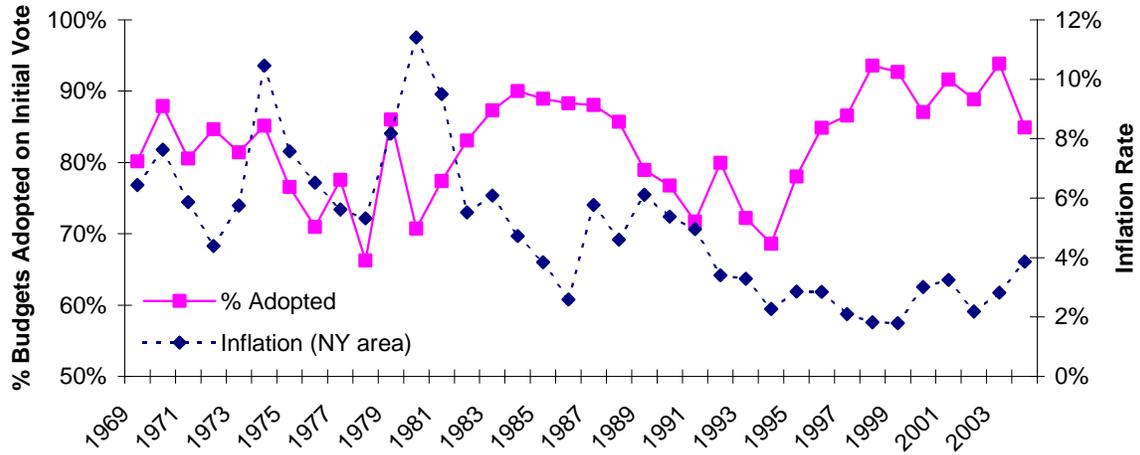
It would also be helpful to understand why district size matters. What is it about districts with more pupils that influences voter behavior? Are there other aspects of district management for which district size matters?

Voter turnout would be worth looking at, too, but SED does not have data on the number of qualified voters for each district.

Finally, further inquiry into the reasons for the higher budget failure rate among Long Island districts is also worth considering.

## APPENDIX A

Figure A.  
Budget Vote Results (Initial Votes) Compared to Inflation



Note: Inflation calculated using May CPI-U for New York-Northern New Jersey-Long Island, NY-NJ-CT-PA, all items (BLS Series ID: CUURA101SA0).

## APPENDIX B

Table B.  
Bivariate Correlations among Selected District Characteristics

	% Voting "No"	Actual Value per Pupil	Income per Pupil	Pupils (DCAADM)	Local Share of Total Revenues	Local Effective Tax Rate	% Change in Tax Levy	% Change in Spending	% Children in Poverty (FRPL)	Mean	Standard Deviation
% Voting "No"	1.000									38.6%	11.0%
Actual Value per Pupil (TWPU)	-.057	1.000								\$376,248	\$732,953
Income per Pupil (TWPU)	.072	.518**	1.000							\$105,226	\$88,208
Pupils (DCAADM)	.248**	-.110**	.116**	1.000						2,500	2,405
Local Share of Total Revenues	.141**	.491**	.717**	.174**	1.000					46.1%	21.8%
Local Effective Tax Rate	.112**	-.422**	-.218**	.270**	-.188**	1.000				\$17.31	\$4.55
% Change in Tax Levy	.464**	-.001	.030	.045	.038	-.136**	1.000			8.4%	4.1%
% Change in Spending	.322**	.212**	.371**	.152**	.432**	-.064	.351**	1.000		6.2%	3.2%
% Children in Poverty (FRPL)	-.117**	-.253**	-.540**	-.115**	-.643**	-.130**	-.096*	-.364**	1.000	28.9%	18.1%

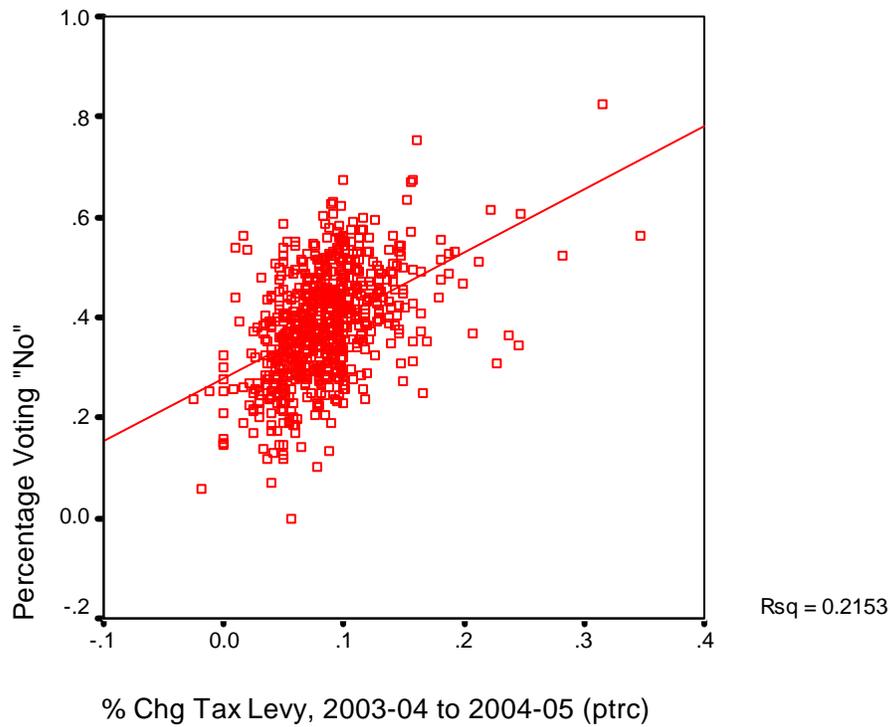
\* p<.05; \*\* p<.01

Source: Data for actual value per pupil (TWPU), income per pupil (TWPU), pupils (DCAADM), local share of total revenue, and the local effective tax rate are from or based on the *Fiscal Profiles Masterfile, 2002-03*, available online at [http://www.oms.nysed.gov/faru/Profiles/profiles\\_cover.htm](http://www.oms.nysed.gov/faru/Profiles/profiles_cover.htm). An appendix available on the same site includes definitions of the variables. The change in tax levy and spending are from the Property Tax Report Card for 2004, which is available online at: [http://stateaid.nysed.gov/propcard\\_04.htm](http://stateaid.nysed.gov/propcard_04.htm). The children in poverty variable is a three-year average of the district's percentage of pupils eligible for free- or reduced-price lunch.

## APPENDIX C

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Figure C.  
Scatterplot Showing the Relationship between the Proposed  
Tax Levy Increase and the Percentage of Voters Rejecting  
the School Budget by District, May 2004



## APPENDIX D: TECHNICAL DEFINITIONS

**Actual Value/Pupil:** Actual Value per Total Wealth Pupil Unit. Actual value is the total assessed valuation of property on the tax rolls within the district adjusted by the State equalization rate determined for such rolls. The actual value data is obtained from the Office of Real Property Services through the Office of the State Comptroller. See below for a definition of the Total Wealth Pupil Unit.

**DCAADM:** The Duplicated Combined Adjusted Average Daily Membership figure is the best count of the number of students receiving their educational program at district expense. It combines the Average Daily Membership (ADM) of students enrolled in district programs (including half-day kindergarten pupils weighted at 0.5); plus equivalent secondary attendance of students under 21 years of age who are not on a regular day school register; plus students with disabilities attending Boards of Cooperative Educational Services (BOCES) full time; plus pupils with disabilities in approved private school programs including State schools at Rome and Batavia plus pre-kindergarten pupil enrollment (weighted at 0.5) plus resident students for whom the district pays tuition to another school district (children in a half-day kindergarten program are weighted at 0.5) plus incarcerated youth. Beginning with the 1999-2000 school year, pupils resident to the district but attending a charter school are included in the DCAADM.

**Income/Pupil:** Income per Total Wealth Pupil Unit. The income is the New York State Adjusted Gross Income; the pupil count is the TWPU (see below). The data source for the *Fiscal Profiles* is the State Aid Suspense File.

**Local Effort Rate:** This item is calculated by dividing local revenue by the actual property value of the district in the prior year, with the result multiplied by 1,000 and rounded to two decimal places. See the appendix to the *Fiscal Profiles* for a more complete description.

**TWPU:** The Total Wealth Pupil Unit is a weighted count based on the adjusted average daily attendance of K-12 pupils resident in the district plus additional weightings for pupils with special educational needs, pupils with disabilities, and secondary school pupils; half-day kindergarten pupils are weighted at 0.5.