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# Estimating Resource Costs of Levy Campaigns in Five Ohio School Districts\*

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# ABSTRACT

Using Levin and McEwan's (2001) "ingredients method," this study identified the major activities and associated costs of school levy campaigns in five districts. The ingredients were divided into one of five cost categories—human resources, facilities, fees, marketing, and supplies. As to overall costs of the campaigns, estimates ranged from a low of \$9,164–\$13,027 (District C) to a high of \$121,053–\$154,072 (District E). Costs per resident ranged from \$1.35–\$1.69 (District A) to \$2.55–\$3.25 (District E). However, costs per student ranged from a low of \$6.55–\$9.31 (District C) to a high of \$17.54–\$22.33 (District E). We find that community volunteers—and especially student volunteers—can be a valuable resource in that they incur lower costs than central office campaigns whose administrative salaries drive up opportunity costs.

# INTRODUCTION

Ohio's troubled and often litigated school finance program is well documented (Alexander and Alexander 2009; Hunter 2000; Maxwell and Sweetland 2008; McKinley and Phillis 2008; Murphy 1983; Porter 2010). Not unlike other states, Ohio funds its schools through a combination of local property taxes and state aid. What is unusual is the sheer frequency in which voters are asked to decide whether or not to approve additional taxation for the purposes of funding schools. It has been contended that, "Ohio relies on voter approval of tax levies to support public education to a greater extent than any other state in the nation," noting that from 1994 to 2006 there were 3,433 local school tax issues on ballots in Ohio

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(Fleeter 2007, 1). This large number of local property tax levies on Ohio ballots annually results in part from a 1976 constitutional amendment that prohibits property taxes from increasing as property values rise. As a result, districts are forced to continually return to the ballot in order to keep up with inflationary costs (Maxwell and Sweetland 2008). Levy campaigns incur costs to both the district and participants, especially so if the district pursues multiple levies in a year or pursues another campaign after a failed attempt. Time and resources spent by school leaders, teachers, support staff, and community volunteers are time and resources that could potentially be utilized for other activities. While there has been some research into estimating the costs associated with volunteerism (Brent 2000), there are no studies that have estimated the costs of levy campaigns. Researchers (e.g. Johnson 2008; Maxwell and Sweetland 2008) have suggested that these campaigns are time consuming and sap energy and resources away from what Hoy and Miskel (2007) call the technical core of schools-teaching and learning. This study provides evidence of the extent to which resources (budgetary and human resources) are being spent in efforts to pursue additional or status quo public funding for education in the context of five Ohio school districts.

Using budgets, state reports, district websites, and interviews with key stakeholders, this study sought answers to the following questions:

- 1. What were the major activities/ingredients undertaken in the school levy campaigns of the five case study districts?
- 2. What were the costs associated with each major activity/ ingredient?
- 3. What were the total costs of the campaigns and total cost per district resident and student?

# LITERATURE REVIEW

Researchers have examined the factors that influence the outcome of school budget referenda/or bond issues, such as demographic/district variables (e.g. Berkman and Plutzer 2006; Bowers, Metzger, and Militello 2010; Ehrenberg, Ehrenberg, Smith, and Zhang 2004; Gradstein and Kaganovich 2004; Ladd and Murray 2001; Poterba 1997). Research also has examined the political tactics that are related to school budget referenda passage (e.g. Balsdon, Brunner, and Rueben 2003; Davis and Tyson 2003; Johnson and Ingle 2009).

It has been noted that economic evaluations of education programs have been sparse and that such studies are rarer in education than in other public policy arenas (Levin 1991; Harris 2009; Hummel-Rossi and Ashdown 2002; Monk and King 1993; Ross 2008). This has been attributed to three factors. First, there are the difficulties associated with the conceptualization and calculation of costs and effects. Second, there are issues associated with the identification and justification of the distribution of costs and effects across stakeholder groups. Lastly, there are factors that have limited the generalizability of the studies conducted (Rice 1997, 310). Harris cites two reasons for the lack of consideration of cost in education economists have generally shown little interest in applying their techniques to education and that norms of practice in educational research do not encourage consideration of costs. Harris notes the maddening 'catch-22' of the literature, stating, "There have been few cost analyses because there has been no basis of comparison and no basis of comparison because there have been so few cost analyses" (2009, 3).

The relative dearth in the economic evaluation of education programs is still there, but this is starting to change. Recent studies and reports have estimated the costs associated with various educational activities. These include the costs of alternative certification programs (Iatarola and Ingle 2004; Rice and Brent 2002), National Board certification (Rice and Hall 2008), needs assessments (Ross 2008), school volunteers (Brent 2000), and the development and implementation of state standards, assessments, and accountability systems (e.g. Hoxby 2002; Phelps; 2000 Harris et al. 2008; Taylor 2005).

Most germane of these recent studies is that of Brent (2000), who examined the nature and costs of volunteerism in schools, finding that volunteers improve school-community relations, but high-poverty schools have fewer volunteers than other schools. As to costs, volunteers provide services to schools without pay, but there are costs nonetheless, such as those associated with training and volunteer recognition programs/activities. There were other incidental costs too, such as bus/cab fare reimbursements, postage, supplies, telephone, and printing. A potentially large expenditure related to volunteerism is that of litigation. Two schools represented in Brent's study were embroiled in personal injury litigation (e.g. slip-and-fall lawsuits). Brent noted that, "although the use of personnel resources does not translate directly into additional budgetary expenditures, they involve significant opportunity costs" (2000, 508).

So what accounts for the recent increase in studies estimating the costs associated with educational activities? This increase may be due to the development of cost analysis methodologies that have effectively dealt with the factors identified by Rice (1997)—difficulties associated with the conceptualization, identification, justification, and distribution of costs and effects. While the lack of generalizability remains, cost analyses of educational programs are commonsensical—especially in an era characterized by increased accountability. There is an intuitive need for the identification of resource costs and economic evaluation of programs and

55

services. In this review of the literature, there does not appear to be empirical research that estimates the costs associated with school levy campaigns. This study seeks to fill this gap in the literature.

#### METHODOLOGY

This study identified the major activities and the associated costs of five levy campaigns in five Ohio districts (Table 1). This analysis focused on five districts that put forth new operating levies on the November 2008 ballot. New operating levies were chosen, as research suggests that these levies have the highest failure rates among voters (Fleeter 2007; Johnson and Ingle 2009). Selected were two rural districts (one passed its levy, one failed), two suburban districts (one passed, one failed), and one urban district (passed). Ohio has 15 districts that are classified by the Ohio Department of Education (ODE) as "Major Urban School Districts with Very High Poverty." Of these, six districts had a total of seven levies on the ballot—six passed and one failed. The high voter turnout in the November 2008 election, especially among minorities, may explain the high passage rate among these constituencies. Due to having only one urban district with a failed operating levy—and an inability to protect the identity of the district—only one urban district (passing its levy) was selected.

In determining the costs incurred in running a school levy campaign, campaign budgets and expenditure statements can serve as a good starting

	District A	District B	District C	District D	District E
Characteristic					÷
District Type	Suburban	Suburban	Rural	Rural	Major Urban – very high poverty
District Total Population*	17,000 (31,000)+	13,900	3,700 (5,200) +	7,800 (10,000) +	47,400
K-12 Student Enrollment*	4,500	3,000	1,400	2,200	6,900
% White**	90	85	90	95	20
% Minority**	10	15	10	5	80
% Free/Reduced Lunch**	10	15	30	35	65
District Designation***	Excellent with Distinction	Excellent with Distinction	Effective	Effective	Continuous Improvement
Levy Outcome	Pass	Fail	Pass	Fail	Pass

<i>There is believe District Characteristics</i> , 2000	Table 1.	Select	District	Characteristics,	2008
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\*Numbers are rounded to the nearest 100 in order to protect the identity of the cooperating districts.

\*\*Numbers are rounded to the nearest five in order to protect the identity of the cooperating districts.
\*\*\*Ohio school district ratings (academic emergency, academic watch, continuous improvement, effective, excellent, excellent with distinction) are based on student performance on state standardized tests.

+ Includes unincorporated rural areas served by the school district.

point for a resource cost analysis, but these accounting costs report only "harddollar" costs—the actual expenditures found in budgets. The inadequacies of using only budget and expenditure statements have been documented (Levin and McEwan 2001; Rice and Brent 2002). Two problems, in particular, arise when exclusively using budget and expenditure data. It is difficult to discern the particular budgetary or expenditure items specifically related to the program as budgets are often reported on a line-item basis and do not reflect programmatic spending. For example, a copier may appear as a line item under "Equipment" on a school's budget, but how much of the annual cost of this machine is used for instruction or for administration? Likewise, a superintendent is paid an annual salary to manage a school district and to provide leadership according to the school district's vision, mission, and goals, but how much superintendent (and other district employees') time is devoted to activities associated with a levy campaign? Furthermore, budgets or expenditure statements do not reflect full economic cost of off-budget items, such as opportunity costs.

Opportunity costs are those incurred when using resources for one particular purpose and not another. Other than costs associated with volunteer training and/or recognition (See Brent 2000), a volunteer will incur no other budgetary costs for participation in the levy campaign. In our districts, these costs were borne by the campaign committees. However, volunteerism of parents, students, and school district personnel<sup>1</sup> precludes their participation in other activities such as pursuing part-time employment, helping their child with homework, or doing after-hours activities, such as grading or lesson planning. Thus, campaign volunteers are not cost free and must be appropriately valued in a cost analysis.

In order to estimate resource costs with greater precision than methods relying solely on budgetary or expenditure data for cost estimates, we utilized Levin and McEwan's "ingredients method" (2001). This methodology has been called the "ideal approach to measuring costs" (Harris et al. 2008, 25). First, we identified the ingredients used in the campaigns. An analogy of baking a cake has been used to illustrate this concept (Iatarola and Ingle 2004). Amounts and ingredients vary from recipe to recipe, but some common ingredients would nonetheless be required. Much is the same for cost analyses. In this analysis, resources were identified and grouped into categories (e.g. personnel, facilities, equipment).

Second, we then placed a monetary value on the ingredients with these cost categories. Resources were measured in raw units (e.g., the number of hours spent

<sup>1.</sup> Per §9.03 of the Ohio Revised Code, political subdivisions can expend public funds to communicate information, but not to support or oppose the passage of a levy or bond issue. School district personnel that served as informants for this study were quick to point out that activities actively supporting campaign activities were undertaken before or after school hours.

on a particular task), which were estimated into cost figures by identifying the opportunity cost per unit. For example, the opportunity cost of administrators' time was measured by their hourly rate of compensation, including salary and fringe benefits. Students' earning potential was measured by their hourly rate of compensation at minimum wage. This was done using information from all available data sources. What follows is a description of the data sources used in estimating the costs associated with the five campaigns.

#### DATA COLLECTION

Four sources of data were utilized in this study-budgets, state reports, district websites, and interviews with key stakeholders. Budgetary documents consisted of two different types. First, we drew from campaign budgets specific to the time of year that the referenda were held. By law, these must be filed with the local Board of Elections and are readily available to the general public, typically via the internet or by request. Second, we used district budgets to estimate costs associated with campaign activities. A third source of data that we drew from was publicly available school district documents/websites and state reports that quantify variables such as the average and median salaries for specific school personnel by type (e.g. teachers and administrators). The centerpiece of our data collection activities was interview data collected from district-level administrators, school-level administrators, teachers, and parent volunteers in the selected Ohio school districts. In total, 23 informants from the five sampled districts were interviewed. Although not the focus of this article, the interview data provided a deeper understanding of the campaign strategies and the micropolitics of the cooperating school districts (Ingle, Johnson, and Petroff 2010).

Preliminary informants were purposively selected based on their leadership roles within the district and/or campaign (e.g. district superintendent, school treasurer). Using a snowball sampling technique, initial informants were asked to identify additional stakeholders who participated in the campaigns and would serve as useful informants (e.g. community campaign chair, parent-, teacher-, and community volunteers). The semi-structured interviews were approximately 1–2 hours in length and consisted of questions related to their role in the development and implementation of the political campaign in support of the levy and the costs associated with the levy campaign. The interviews were completed between December 2008 and May 2009—within six months of the November 2008 election day. This was done in order to mitigate any loss of detail that could result from the passage of time. Interviews were audio recorded and transcribed verbatim. The interviews were integral in quantifying campaign costs by capturing the number of participants, who these participants were, and what they did in order to calculate their real or estimated hourly rates of compensation.

Informants were asked to discuss levy campaign activities and costs in terms of three stages: campaign planning, campaign implementation, and campaign debriefing. While campaign planning activities and campaign implementation activities may be intuitive to the reader, debriefing may need elaboration. We define debriefing activities as those which involve analyzing the results and factors that contributed to the success or defeat of the levy campaign being studied.

#### FINDINGS

Ingredients were identified by means of our four data sources—budgets, state reports, district websites, and interviews with key stakeholders. The ingredients were divided into one of five cost categories—human resources, facilities, fees, marketing, and supplies (Table 2), which are discussed in greater detail in the following sections.

# Human Resources

In the case of human resources, interviews with key stakeholders—for example, superintendents, school district treasurers, campaign (sub)committee chairs, and co-chairs—were integral in estimating how many district stakeholders were involved in the campaigns (Table 3). Furthermore, it was important to estimate how many hours were spent on campaign activities by these stakeholders. Hours of involvement were determined in two ways. Whenever possible, participants were asked directly to estimate the number of hours devoted to the levy campaign. In cases when campaign participants were not available, the time was estimated based on information provided by levy campaign (sub)committee chairs or other key stakeholders. Time spent on the levy campaign was divided into tasks such as committee meetings, mailings, fund raising, calling, signs, and election day activities. Hours spent on the campaign were totaled per individual.

Not only was it important to know how many hours were spent on the campaign activities, it was also important to know who these people were in order to estimate the opportunity costs of levy campaign involvement. Whenever possible, actual annual salaries of teachers, administrators, and support staff were used to estimate these costs. If not, median salaries were used drawing from Ohio Department of Education (ODE) administrative databases or bargaining unit contracts (publicly available online). A range of high, medium, and low estimates was established by first analyzing a most likely cost as the

Table 2. Summary of Cost Estim	lates in Fi	ve Ohio	Levy C	ampaig	gns*										
		District A			District E			District (			District I			District ]	[1]
Cost Categories & Ingredients	Low Estimate	Medium Estimate	High Estimate												
Human Resources															
Administrators	1,148	1,305	1,453	1,336	1,781	2,254	3,792	4,681	5,664	15,046	18,575	22,476	6,768	10,974	15,895
Teachers	006	1,000	1,100	10,125	12,500	15,125	74	91	110				4,769	9,167	15,679
Community Volunteers	19,941	24,255	28,465	1,165	1,438	1,740	2,796	3,452	4,177				5,735	10,321	16,650
Students	936	1,147	1,358	1,175	1,305	1,436	159	196	237						
PR/Statistical Analysis	9,000	9,000	9,000	630	755	1,129							15,950	15,950	15,950
Subtotal for Human Resources	31,925	36,707	41,376	14,430	17,780	21,683	6,820	8,420	10,188	15,046	18,575	22,476	33,222	46,412	64,173
Facilities															
Homes	236	534	1,153	31	68	151									
Office Space													104	408	1,456
Board of Education/Public Building	gs 29	73	175	79	177	314	122	275	489	47	141	376			
Utilities Prorate*	10	22	46	3	5	6	3	5	7	4	7	11	171	415	886
Subtotal for Facilities	275	629	1,374	113	251	474	125	279	496	51	148	387	275	823	2,342
Fees															
District Chargeback	3,097	3,097	3,097	1,591	1,591	1,591	253	253	253	652	652	652	38,343	38,343	38,343
Event Fees	25	25	25												
Subtotal for Fees	3,122	3,122	3,122	1,591	1,591	1,591	253	253	253	652	652	652	38,343	38,343	38,343
Marketing															
Technology	17	17	17				3	4	4				165	165	165
Signs	4,390	4,390	4,390	1,029	1,029	1,029	1,184	1,246	1,308				4,205	4,205	4,205
Advertisements & Posters				3,074	3,074	3,074	494	494	494	558	558	558	27,958	27,958	27,958
Mailings & Postage	790	790	790	3,748	3,748	3,748				25	25	25	13,084	13,084	13,084
Design & Graphics										658	658	658	539	539	539
Voter ID Calls													2,300	2,300	2,300
Give aways	1,030	1,030	1,030							436	436	436			
Subtotal for Marketing	6,227	6,227	6,227	7,851	7,851	7,851	1,681	1,744	1,806	1,676	1,676	1,676	48,251	48,251	48,251
Supplies															
Event Supplies				803	803	803							963	963	963
Office Supplies	313	313	313	122	122	122	285	285	285	286	286	286			
Subtotal for Supplies	313	313	313	925	925	925	285	285	285	286	286	286	963	963	963
TOTAL COSTS	41,862	46,998	52,412	24,909	28,397	32,524	9,164	10,980	13,027	17,710	21,336	25,476	121,053	134,792	154,072
Cost per Resident	1.35	1.52	1.69	1.79	2.04	2.34	1.76	2.11	2.51	1.77	2.13	2.55	2.55	2.84	3.25
Cost per Student	9.30	10.44	11.65	8.30	9.47	10.84	6.55	7.84	9.31	8.05	9.70	11.58	17.54	19.54	22.33
* Costs are rounded to the nearest d	بمتتم عمالم														

\*Costs are rounded to the nearest dollar amount

Stakeholder Type	District A	District B	District C	District D	District E
District-level Administrators	2*	2	2	2	2*
District-level Staff	3	3	3	1	0
School Board Members	2	5	1	0	2
School-level Administrators	1	9	0	0	3
Teachers	2	10	2	0	22
Parent/Community Members	13	5	8	0	27
Students	70	20	15	0	0

Table 3. Campaign Participants and Roles in Five Ohio Levy Campaigns

\*District level administrators in these districts were reported as being limited to building consensus with school board members for a levy campaign and answering questions at public forums.

medium estimate. Then upper and lower ranges were estimated—using 10% above and 10% below the medium estimate for both time and hourly rate for the employee. Therefore, the high estimate of the opportunity costs was the estimated high hours multiplied by the estimated high hourly wage rate and the low estimate of the opportunity costs was the estimated low hours multiplied by the estimated low hourly wage rate.<sup>2</sup> For the purposes of this analysis, hourly rates were calculated using the annual (or median) salary  $\div$  52 weeks per year  $\div$  40 hours per week = hourly rate. However, we fully acknowledge that school superintendents, treasurers, principals, and teachers often work well over 40 hours a week.

For community volunteers, we again drew from the ODE administrative databases for district demographic and socioeconomic data, including median income for each district. The median income was utilized since it represents the income level at the middle of the highest income value and the lowest income value. The median income was chosen for all districts in the study for consistency and to avoid any skewness. Districts A and B, for example, represent districts that serve communities with higher socioeconomic levels. Based on interviews with informants from each district, it was shared that parent/community volunteers had typically attained higher levels of education and/or skills—suggesting to us that these volunteers were able to earn wages higher than minimum wage. It should be noted that because of the socioeconomic status of Districts A and

<sup>2.</sup> To illustrate this, we provide an example. Say a district-level administrator reported approximately 18 hours per administrator spent on the campaign. High and low estimates for time were calculated as 10% above and below the medium estimate per administrator (20 and 16 hours, respectively). By computing an hourly rate (median district level salary  $\div$  52 weeks per year  $\div$  40 hours per week = hourly rate) for district level administrators (\$40.87), one can estimate a high and low estimate using a 10% above and 10% below method, yielding (\$44.95 and \$36.78, respectively). The high estimate for the district level administrator would be 20 hours x \$44.95=\$899. The middle estimate would be 18 hours x \$40.87=\$735.66. The low estimate would be 16 hours x \$36.78=\$588.48.

61

B, some community volunteers have the option of not entering the workforce, choosing instead to devote time to their own children and community service. The presumption was made that these individuals, if they were to enter the workforce, would have the earning potential at the median income level.

Since volunteer time was not consistently tracked by the districts or the individual, the hour estimates were established from personal accounts, which formed the mid-line base. Hours were then adjusted by 10% above to provide a high range. The low estimate for volunteers was based on only training hours at the median rate. The assumption being volunteers do so willingly and receive personal satisfaction. In addition, volunteers may receive benefit from the training experience. For District A, community members donating specialized services and expertise—for example, demographical/statistical analysis and public relations/design services—were contacted directly and asked to provide estimates of the market value for work done on the campaign. In District E, campaign consulting services were listed as expenditures in publicly available campaign reports.

Our findings suggest that human resource costs ranged from a low of \$6,820-\$10,188 for District C to a high of \$33,222-\$64,173 for District E. Human resource costs were lower for administrators in District A, given the communityled campaign that was reported. In Districts A and E, there was a higher use of community and parent volunteers, therefore the human resource costs were higher for non-administrative participants. While administrators were certainly involved in the campaigns of Districts A and E, it was less so than in District B and D who ran "central office campaigns." District level administrators in Districts A and E reported their activities as being limited to building consensus with school board members for a levy campaign and answering questions at public forums. As such, administrators from Districts A and E could spend more time on other administrative duties required of the job. Informants in District C reported that their campaign started in October and ran for approximately three to four weeks. Because of the timing of the levy campaign, central office administrators were very involved, but the district was able to engage community members (8 parents and 15 students) as well. The short period combined with the efforts of community volunteers contributed to a lower administrative cost and a lower overall human resource cost.

# Facilities

Facilities costs were more difficult to determine. Some meetings and volunteer efforts were held in private homes while others were held in board of education offices. Other events were held in churches and commercial spaces—it was not

feasible to ask community volunteers to determine the utilities and facilities costs for a one-hour coffee meeting at their home. Cost associated with holding a meeting in one room could be calculated by determining the utilities costs on a monthly rate, and then reduced to an hourly cost. The cost for the use of the physical room was calculated on a square foot cost basis, based on the fair market value of the property or on a rental space price for similar properties. The challenge was determining a fair market value for a commercial property with limited use or with limited comparable sales data within the district.

Facilities costs for board offices and schools were determined by utilizing the county auditor's 100% value of the property as a market value. Square footage of the facility also was determined from the auditor's site. A per square foot value and an hourly value was determined. The value of the space used was estimated with a low, medium, and high estimate. For unidentified and multiple use commercial space, such as used in District E, the average market rental price per square foot was used. The square footage of used space was estimated at a low, medium, and high calculation. Utilities rates—gas, water, electric, and telephone—were based on the Public Utilities Commission of Ohio (PUCO) average rates for the fourth quarter of 2008 and from the geographic region of the districts. Rates were calculated to an hourly rate.

District A reported a higher use of private homes than the other districts, and District E reported a higher use of churches and commercial space—thus, overall costs for facilities were higher in those districts. Districts B, C, and D utilized district buildings, primarily the board office for meetings and levy activities. The facilities costs for District D were the lowest at \$51-\$387. District E had the highest facilities costs (\$275-\$2,342) due to the use of commercial space for committee meetings, phone banks, and training.

# Fees

With regard to fees, there were only two basic types. The first and largest of these were what are referred to as "charge backs"—the board of elections fees charged to districts for placing a levy on the ballot. These were available from the County Board of Elections in which the school districts were located. Historically, the November ballot has tended to be a popular time to place levies on the ballot since charge-back costs to the districts tend to be less—due to more referenda on the ballots for national elections, especially in Presidential elections. In addition, Ohio state law caps the amount county board of elections can charge during a presidential general election. Charge backs were an actual cost, so no low, medium, or high cost reporting was necessary.

The second of these were fees associated with local events and festivals. Only

District A reported such fees. District A's campaign budget report for November 2008 indicated a \$25.00 event entry fee, allowing the campaign committee and its volunteers to take part in a festival and parade. At this festival, volunteers passed out informational flyers, distributed campaign signs, signed up additional volunteers, and took part in the parade downtown. The goal of these activities was to inform voters about the issues, successes of students from the district, and encourage people to vote yes on the school levy issue. While District E reported participation in street festivals and parades, no event fees were reported as a cost incurred to participate. However, there were costs (\$168) incurred in District E for transportation to and from meetings and events. These travel vouchers and other transportation costs were included in event supplies.

# Marketing

Due to the nature of levy campaigns, campaign committees, and participating stakeholders seek to inform the public and build support for the levy on the ballot. Marketing efforts and their associated costs were a consistent activity across the five campaigns. However, there was both variation (District A's use of social networking) and similarities in marketing cost ingredients—for instance, the cost of signs. Accounting for the cost of signs used across multiple years was analyzed. In District A, an informant explained, "We had about 1800 signs. We used the same logo from our previous successful operating campaign. I believe we had 800, so we had some to start with." District C also used signs for the costs of yard signs were estimated by transforming the original cost in the year purchased to a current cost in today's dollars using the Consumer Price Index (CPI). The signs had not suffered any negligible damage or wear and tear from storage, so there was no need to depreciate the costs of these signs.

Mailing costs were the highest in District E at \$13,084, but then again, District E is the largest among our sampled districts. As indicated by a District E informant, there was one targeted mailing. Mailing costs includes both the physical piece and postage. District B also utilized mailings during its levy campaign for a cost of \$3,748. District A's mailing costs were lower, but interview data suggested mailing costs were incorporated in the public relations services provided by a volunteer. Districts C and D did not utilize mailings for the campaign. In the case of Districts C, informants indicated direct mail was not used because of the very short campaign time.

District E outspent all other districts in advertising costs. District E utilized brochures, TV ads on small local cable stations, and print media. The district is larger and part of a major metropolitan area, which has higher media costs.

Phone banks accounted for \$2,300 of the marketing costs. The training and volunteer time costs are incorporated into the human resources costs for the district. Districts B and E used multiple forms of marketing including parades, carnivals, and in-home coffees. The central office campaign of District D yielded the lowest marketing costs at \$1,676—with advertisements, pencils, graphics, and give-aways. Because of the short time frame, District C's costs included local news advertising and eschewing TV or radio advertising. District C's costs were only slightly above those of District D. District A's marketing costs were \$6,227. The district's marketing mix included T-shirts, signs, and mailings.

# Supplies

Costs for supplies ranged from a low of \$285 (District C) to a high of \$963 (District E)—not surprising, given that District E represents the urban and largest district in our sample. As will be shown, total campaign costs are represented on per student and per resident bases (Figures 1 and 2). Supplies were categorized as either office supplies or event supplies. Office supplies were just that—paper, pens, staplers, etc. Event supplies included costs for refreshments, paper plates, napkins, etc.

Brent (2000) has reported that 86% of the schools formally recognized volunteers, with costs averaging \$122 per school. District E informants reported hosting a "levy watch party" for volunteers. This would be akin to a campaign headquarters of a political candidate watching the returns being reported by news broadcasters. Watching the results is exactly what District E's campaign committee did, but District E informants reported that this event also served as an opportunity to thank campaign volunteers for their service and build support for the next levy campaign that would (hopefully) come later rather sooner. In the case of District E, the event was a celebration, as the levy was passed by the voters.

# Total Campaign Costs

As to overall costs of the campaigns, estimates ranged from a low of \$9,164– \$13,027 (District C) to a high of \$121,053–\$154,072 (District E). However, District E represented the largest of all sampled districts in terms of population. Given the disparities in district size and individual ingredient costs (e.g. chargebacks), total costs of the campaigns in each district were analyzed on per resident and per student bases. District A's cost per resident (Figure 1) were the lowest, ranging from \$1.35–\$1.69. District E's cost per resident were the highest, ranging from \$2.55–\$3.25. Likewise, District E's costs per student were the highest (\$9.30–\$11.65) with District B (\$8.30–\$10.84) a close third highest (Figure 2).



Figure 1. Costs per Resident in Five Ohio Levy Campaigns, November 2008

Interestingly, District C had the lowest cost per student (\$6.55–\$9.31), but they also ran the shortest campaign, had the lowest human resource costs, and a win at the polls with the highest margin of victory.

Opportunity costs were higher for administrators in Districts D, as more of their time was consumed by the activities associated with the levy campaign. However, the reverse was so in terms of the other districts, which had higher



Figure 2. Costs per Student in Five Ohio Levy Campaigns, November 2008

65

opportunity costs among other stakeholder groups. For example, District A incurred \$19,941-\$28,465 for community volunteers, but only \$1,148-\$1453 for administrator opportunity costs. Districts A, B, and C utilized students who had the lowest opportunity costs (minimum wage per hour).

# SUMMARY

Our study sought answers to three questions. First, we sought to identify the major activities/ingredients utilized by the five case study districts in developing and implementing school levy campaigns in pursuit of additional tax revenue. Second, we sought to identify the costs associated with each major activity/ ingredient. Lastly, we estimated total costs of the campaigns.

The activities/ingredients were divided into one of five cost categories human resources, facilities, fees, marketing, and supplies. Not surprisingly, human resource costs accounted for large percentages of the levy campaigns overall costs. However, we found variation in whom and how much stakeholder groups were involved in the campaigns. Human resource costs were higher for administrators in District D, given the administratively led campaign that was reported. While administrators and other school district personnel were certainly involved in all five campaigns in varying amounts, opting for more community and student volunteers means lower opportunity costs for school district personnel—meaning school district personnel can spend more time on duties required of their respective jobs.

Fees, particularly, charge backs varied from a low of \$253 for District C to a high of \$38,343 for District E. Likewise, marketing costs varied, but were lower in rural districts in comparison to suburban and urban counterparts As to overall costs of the campaigns, estimates ranged from a low of \$9,164–\$13,027 (District C) to a high of \$121,053–\$154,072 (District E). Costs per resident ranged from \$1.35–\$1.69 (District A) to \$2.55–\$3.25 (District E). Costs per student ranged from a low of \$6.55–\$9.31 (District C) to a high of \$17.54–\$22.33 (District E).

# IMPLICATIONS FOR PRACTITIONERS

This study suggests that community volunteers—especially student volunteers can be a valuable resource in that they incur lower costs than central office campaigns whose administrative salaries drive up the opportunity costs. Student volunteerism (and volunteerism in general) reflects very little accounting costs, but are not cost free. As this study has shown, there are opportunity costs associated with volunteerism. The analysis of budgetary costs associated with volunteer training and recognition were small and borne by campaign

67

committees, which are external to the school districts' budgets. Opportunity costs associated with volunteer training and recognition in our sampled districts took the form of school/district personnel utilizing their time to train and publicly acknowledge these volunteers. That said, opportunity costs of parent/ community volunteerism are less than that of administrators; and opportunity costs of student volunteerism are even less than those of parent/community volunteers—due to the fact that the earning potential of adults is typically higher than that of students (minimum wage). This was especially so in Districts A and B, which served more affluent communities.

Given the extent to which Ohio districts must regularly pursue voter approval of school levies, school and district employees will likely continue to be highly motivated to take part in levy campaigns and involved—an informant from District E described school personnel's participation as that of "hired guns" and that of community members as "legitimate voices." Mitigating opportunity costs of school and district personnel in favor of other community stakeholders could mean that these school and district personnel can have more time to do what they are paid to do—teach and lead. District personnel and/or campaign committee members must carefully consider the (budgetary and opportunity) costs associated with volunteer training and recognition when planning a district's campaign. The focus should be on maximizing volunteer utility by adequately preparing volunteers in message training and encouraging continued volunteerism through recognition programs. Community volunteers with prior levy campaign experience may add value to future campaign efforts. As such, volunteer recognition can be viewed as an investment in the district's future.

# IMPLICATIONS FOR POLICYMAKERS

The districts in our sample represent only 5 out of 219 Ohio districts that had a total of 236 levy issues on the November ballot. These five districts sought an increase of 31.6 mills in total. It is important to note that November is just one period of time out of four in a calendar year in which levies are put before voters. Using the low estimates of these five levy campaigns, we conservatively estimated the total cost of these five campaigns at \$214,698. Given the sheer number of these levy campaigns in a calendar year, campaign costs add up for school districts across the state. In times of constrained budgets, a downward trending economy, and accountability pressures, districts could use their limited financial and human capital resources toward something other than pursuing additional or status quo funding through levy campaigns. Our study quantifies these costs and provides evidence of why policymakers should consider policy alternatives that decrease the reliance on local property taxes and the frequency in which school districts pursue levy campaigns.

The most obvious policy recommendation would be to amend Ohio's constitutional provision that prohibits tax revenues from increasing as property values rise to at least allow tax revenue growth to be indexed to inflation. Such an amendment would dramatically decrease the frequency of levy requests in Ohio. However, this is easier said than done. Short of such an amendment, policymakers should consider providing tax relief to vulnerable populations (e.g. low income and elderly residents), such as property tax circuit breakers or property tax deferral programs. Property tax circuit breakers provide tax relief to low-income and elderly residents whose taxes exceed a given percentage of income, in the same way a circuit breaker offers protection from an electrical overload (Allen and Woodberry 2006). While the specific policy provisions vary from state to state, generally relief is inversely proportional to income, with benefits declining as income rises and most are aimed at senior citizens (Haveman and Sexton 2008). Another example would be a property tax deferral program, which is designed to allow eligible homeowners the option of delaying the payment of property taxes until the home is sold or the owner's estate is settled. These are typically targeted to the elderly and the disabled (Haveman and Sexton 2008). According to Baer (2005), 25 states have some type of tax deferral program.

# IMPLICATIONS FOR FUTURE RESEARCH

While an obvious limitation of this study is its lack of generalizability, we now have a greater sense of the resource costs incurred by Ohio districts in their efforts to pursue voter approval of additional and status quo funding. A remedy to this limitation is to replicate this study's designs within more districts and make efforts such as those of Harris et al. (2008) in using cost categories to structure future discussions and draw generalizations about the sources of fixed and variable costs—thus identifying the potential savings to school districts if human and financial resources were used elsewhere.

Another potential direction for future research is to go beyond the identification and estimation of resource costs. The next step may be to investigate the cost effectiveness of campaigns. Levin and McEwan state that measures of effectiveness in education are "usually associated with the attainment of a final outcome in children, such as academic achievement. For many reasons, often as simple as lack of data, evaluators can obtain measures of intermediate outcomes only" (2001, 111). Such is not the case for levy campaigns. Outcomes can be measured dichotomously (approved/not approved) or continuously (percentage of yes voters). The biggest challenges would be gaining access to knowledgeable

individuals in districts who can give adequate information about campaign efforts so that costs can be quantified and the sheer number of districts on the ballot in any given year in the state of Ohio. There remains the possibility of testing the relationship between specific expenditures and levy outcomes. For example, is an increase in direct voter contact expenditures related to a higher likelihood of levy passage?

In this study, informants from some districts indicated that they ran "central office campaigns" while informants in other districts ran campaigns that heavily engaged community members. A logical question would be to ask why some districts opt for one approach over another. Researchers may want to delve deeply into the inner workings of district and levy campaign efforts. Indeed, the extant research on district-level politics has been described as drawing "the intermittent attention of political scholars" (Bjork and Lindle 2001, p. 77). While there has been interest in the districts' role in implementing state/federal policies (Iatarola and Fruchte 2004; Rorrer, Skrla, and Scheurich 2008), there is little research on the district's role in school budget referenda campaigns. Welldesigned qualitative case studies of school districts that go on the ballot can focus not on generalizability, but on the particularity of their campaign(s) and the rationales for their chosen course(s) of action. Such studies could provide insight into the complexities of their micro-political environments and the strategies used to win support for school levies. Our future research will focus on the micro-politics of these levy campaigns and how and why certain decisions were made, drawing from the rich interview data collected from district-level administrators, school-level administrators, teachers, and parent volunteers in these five Ohio school districts.

# CONCLUSION

Kenyon (2007) noted the policy debate across the country regarding the degree to which schools should be funded with property tax dollars. In Ohio, this debate certainly remains. School districts and the stakeholders therein, must continue to struggle with maintaining the stability and adequacy of services provided and resources generated by local taxes. Regardless of the November 2008 campaign results, informants across all five districts spoke of the inevitability of the next levy campaign. Indeed, it has been noted that, "there are two types of school districts in Ohio: those that are on the ballot and those that will be" (Johnson 2008, 45). As District A's superintendent resignedly put it, "We will be back at it when this one expires in four years."

#### 70 JOURNAL OF EDUCATION FINANCE

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