Convenient Turnout: A Case Study of the Indiana Vote Center Pilot Program

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Abstract

As academics have questioned the efficacy of convenience voting in increasing turnout, state legislatures and county election boards have responded by curtailing the availability of these innovations, particularly early voting. In the article, we contend that the combined use of vote centers, or super-precincts, with early voting offers a potential means of increasing voter turnout and the quality of the election experience while reducing the cost of elections at the same time. We present original data from the 2004 and 2008 elections consisting of a controlled comparison of three Indiana counties with vote centers and three using traditional precincts. Our findings of increased turnout in vote center counties, particularly among those who participate infrequently, are admittedly preliminary. However, because we also find that vote centers substantially reduce election costs, we contend that this issue merits examination.

Keywords: early voting, vote centers, convenience voting, turnout, election costs.

1. Introduction

In 2008, fully one third of the electorate cast ballots prior to Election Day. Convenience voting has become an important issue in literature on electoral institutions and political behavior, one that speaks to classic debates on the motivations behind political participation. Studies in this field have yielded mixed results about the efficacy of measures such as mail-in ballots, no-excuse early voting, and vote centers in affecting turnout and the composition of the electorate. Frequently, studies questioning turnout effects of convenience voting measures have concluded that they constitute a handout to the politically engaged. Academic ambivalence on the issue has a striking parallel in current policy debates on proposed convenience voting measure implementation. While some jurisdictions are striding forward, others cite cost, logistics, and efficacy in scaling these measures back.

In this paper, we consider the effects of the combination of early voting with the use of vote centers, or superprecincts that consolidate many smaller traditional precincts. Vote centers eliminate traditional polling locations and allow voters to cast their ballots at any of several locations within the county, giving them access to the franchise at locations close to where they work, live, attend school, or shop. Early voting is a key part of the vote center model as it reduces Election Day congestion at the polls. Indiana allowed three counties (Cass, Tippecanoe, Wayne) to use vote centers on a trial basis beginning in 2008. We compare changes in turnout from the 2004 to 2008 elections between these three counties and three similar counties that relied on traditional precincts (Blackford, Delaware, and Grant). Our preliminary evidence suggests that vote centers were associated with increased early voting and turnout. Further, we find that vote centers appear to have attracted infrequent voters, particularly through early voting.

Because vote centers are a relatively recent innovation, we do not have the luxury of observing several election cycles of data to determine whether the turnout increase is indeed transitory. Yet, our data show that vote centers combined with early voting 1) have the potential for attracting infrequent voters to the polling place, and 2) reduce the average cost per vote of election administration. Both of these results have important implications for policymakers seeking to lower election cost without sacrificing election turnout. The premature rejection of these forms of convenience voting risks civic harm. Simply stated, at least with regard to vote centers, it is too early to close the books on early voting.

2. Convenience voting: the literature and policy

Convenience voting has rapidly increased in recent years, taking a variety of forms including vote by mail, in person early voting, and absentee voting. Advocates of early voting hold that making the franchise more convenient reduces the costs associated with the act of voting and spurs turnout. Election administrators hold that many forms of convenience voting reduce the costs of holding elections and are a good bargain for taxpayers.

A substantial literature already exists regarding the impact of early voting on turnout. Early studies of vote by mail showed substantial increases in early adopting states like Oregon, Washington and California (Magleby, 1987; Southwell & Burchett, 2000). However, Gronke and Miller (2008) attribute these results to early novelty, finding that mail voting turnout declined significantly over time. With regard to absentee balloting, Oliver (1996) finds that liberalizing the rules to include no-excuse absentee voting increases turnout provided that there are concurrent party efforts to increase participation. Stein and Vonnahme (2008) investigated the use of non-precinct based vote centers in Colorado which permitted voters to cast ballots at any number of locations near to where they shop, work or live and found that vote centers marginally increased voting day turnout. However, in a review of the literature, Gronke et al. (2008) conclude that no-excuse absentee balloting, permanent absentee balloting, and early in-person voting have no effect on turnout; only voting by mail has a statistically significant positive impact. Similarly, Fitzgerald (2005) finds little evidence that convenience voting and measures that make registration easier increase turnout.

With regard to the identity of convenience voters, Jeffe and Jeffe (1990) found them to be politically engaged, conservative, and from upper socio-economic levels. Stein's study of exit poll data from the 1994 Texas gubernatorial race found early voters "demonstrated a greater interest in politics and stronger partisan and ideological ties than did election-day voters" (1998, p. 67). They were also less wealthy than their Election Day counterparts. Richardson and Neeley (1996) found that while early voting increased turnout in Tennessee elections surveyed, demographic differences between early voters and Election Day voters were slight but also varied from primary election to general election. A later study by the same authors (Neeley & Richardson, 2001) found few significant differences between Election Day voters and early voters. Several studies have found that vote by mail and absentee voters tend to be older and more highly educated (Berinsky, Burns, & Traugott, 2001; Karp & Banducci, 2000, 2001). Stein and Vonnahme (2008) found that the use of vote centers increased turnout among "unengaged" or less frequent voters. More recently, in a study of five hundred counties over nine election cycles Giammo and Brox (2010) reported that early voting produces only minimal short term gains in voter turnout.

With regard to administrative costs of convenience voting, the literature is sparser. In their review of existing studies, Gronke, et al (2008) report that much of what is known exists outside academic journals in financial reports of election administrators. They cite an example from the Washington Secretary of State indicating that vote by mail reduces administrative costs over precinct voting from \$8.10 per voter to \$2.87. Overall, however, they conclude: "No academic studies that we are aware of have taken up the question of the costs of elections" (pp. 448-449). More recently, Hill (2011) has examined voting costs in California, finding that early voting increases election costs.

The checkered data regarding turnout and the lack of data on cost make it practical to reject calls to forsake early voting through vote centers as a failed convenience voting experiment. The policy conclusions on convenience voting offered in the literature range from pessimism (e.g., Karp and Banducci (2000) declare voting only by mail not to be a panacea) to condemnation. Berinsky (2005) argues that convenience voting reforms predominantly benefit the politically engaged. Finding no increase in turnout from early vote measures, Giammo and Brox (2010) conclude counties should devote their resources to expanding election day access instead.

Ambivalence among the academic literature over the efficacy and social value of convenience voting (particularly, early voting and vote centers) has spread to policy community. While some areas have embraced convenience measures, others have rejected them and sought to retrench existing programs. Larimer County in Colorado became the first jurisdiction to use vote centers in 2003 and has been followed by Adams and Arapahoe. After the introduction of vote centers in the three Indiana counties for the general election in 2008, the legislature voted in 2011 to allow all counties to consolidate precincts. The use of vote centers has been proposed and is under consideration in Travis County, Texas and elsewhere.

However, vote centers have not been universally embraced. A proposal to use them in Guilford County, North Carolina in 2006 failed to gain sufficient support for implementation. The DC Board of Elections considered vote centers for the April 2011 special election but decided not to use them. More broadly, the Florida state legislature has voted to cut the early voting period from fourteen to eight days, citing costs to election boards. Similar measures have gained support in Ohio and Wisconsin as legislators increasingly question the costs of providing convenient polling.

3. Is convenience voting really convenient?

Our concern with these pessimistic policy conclusions about early voting stems from the observation that the way it is typically measured in academic research, i.e. its statutory availability, may not truly capture the convenience of voting. While we acknowledge the well-known and inherent difficulties of measurement particularly of institutional features, there is tremendous variation in the ease and convenience of early voting among the jurisdictions that allow it. The confounding factor in the analysis of early voting is the location of the polling place. Early voting typically requires voters to travel to the seat of county government from their homes. Two innovations in polling locations enhance the appeal of early voting by providing more geographic opportunities. Satellite voting locations typically consist of a few polling stations located around the county where voters can submit ballots prior to Election Day. Vote centers, or super-precincts, replace traditional precincts altogether (both prior to and on Election Day) combining them into a smaller number of large centers, any of which a voter can choose.

Satellite locations and vote centers are similar in that both allow early in-person voting in locations other than the county seat. However, vote centers offer greater convenience for three reasons. First, vote centers offer clarity and eliminate potential confusion over polling locations as they replace precincts entirely, while satellite locations only operate early. Second, voters may choose any vote center in the county while individual satellite locations only have ballots for citizens from specified subdivisions (e.g., townships or contiguous precincts). Third, vote centers typically have more equipment and staff than satellite locations, reducing the time costs of voting.

The added flexibility of these arrangements reduces the effort and cost associated with voting. In particular, the addition of potential voting locations can reduce travel time. For example, prior to 2008, the main voting center in Lake County, Indiana required many early voters to travel as much as 45 minutes one way to cast a ballot. Also, counties requiring early voters to visit one central location see more congestion and delays with increased early voter turnout. In the 2008 election, Indiana counties that did not have vote centers reported significant wait times for early voters, as high as several hours in Marion and Hamilton counties (Kelly, 2008).

How might the use of vote centers affect the size and composition of the electorate? Regardless of the decision-making model one adopts to explain voter behavior, participating in elections requires voters to have information about polling locations, access to the polls, and time to reach them. By replacing the numerous traditional precincts with a few high profile locations which any voter can utilize, vote centers provide clarity for voters and expanded access to the polls. Through early voting, vote centers reduce congestion lowering the time required to vote. If these convenience factors matter to the electorate, we should expect greater turnout by groups who traditionally do not vote when vote centers are in use, as the marginal increases in convenience make voting more attractive. Moreover, we should expect that these voters should make use of convenience features like early voting. Hence, we suggest three hypotheses:

Hypothesis 1: More votes will be cast early in vote center counties than in traditional precinct counties.

Hypothesis 2: Vote center counties will have higher voter turnout than traditional precinct counties.

Hypothesis 3: Vote center countries will draw greater numbers of new and formerly infrequent voters than traditional counties.

4. Analyzing the data from Indiana

To test these hypotheses, we consider a controlled comparison of data from six Indiana counties from the 2004 and 2008 general elections. Three of these counties (Cass, Tippecanoe, and Wayne) were selected by the Secretary of State to use vote centers in 2008 while the rest of the state used traditional precincts; all 92 counties allowed early voting. The comparison of turnout changes in these counties offers us something close to a natural experiment; changes in the competitiveness and effort in statewide elections are constant across vote center and non-vote center counties.

While this comparison does offer something close to a natural experiment in that statewide election characteristics are constant between the two groups, the selection of the treatment (in this case, which counties used vote centers) was not random. A 2006 Indiana law allowed Secretary of State Todd Rokita to select three counties to participate in a vote center pilot program for the 2007 municipal and 2008 primary and general elections. Only two counties, Tippecanoe and Wayne, applied to participate and they were selected on the basis of an application that detailed their logistical plans for implementing the centers. Cass County was later added after submitting such an application as well.

Although the program was not designed to change the size or composition of the electorate and none of these counties was identified as interested in generating greater turnout, any assessment of its results must account for the potential of selection bias. If covariates of turnout or any election specific turnout effects are correlated with the selection of vote center counties, the results of a turnout analysis will be biased. To counter potential bias, we select control counties using nearest neighbor matching based on a propensity score model. The model generates the scores based on demographic and socioeconomic characteristics associated with voter turnout (population, median household income, and percent of those above age 25 with college degrees) as well as predictors of an "Obama effect" (percent of population non-white, percent of population ages 18 to 24, and the percent of the 2004 votes cast for John Kerry).² The three counties selected for comparison are Blackford, Delaware, and Grant. Their initial similarities with the vote center counties are noted in Table 1. We note also that our main findings are actually stronger when compared to the entire state of Indiana rather than just the three comparison counties.

TABLE 1. Demographic comparisons of vote center (VC) and control (C) counties								
County	2008 Population	Median household income	Percent ages 18-24	Percent non- white	Percent voting for Kerry (2004)	Percent over 25 with college degree		
Cass (VC)	39,123	\$39,593	8.7	3.4	29.7	7.1		
Blackford (C)	13,599	\$36,551	7.4	1.7	34.6	6.7		
Tippecanoe (VC)	164,237	\$40,036	25.4	9.6	39.3	18.1		
Delaware (C)	117,797	\$35,843	19.8	9.3	42.0	10.8		
Wayne (VC)	67,795	\$36,145	9.2	7.4	38.1	8.0		
Grant (C)	70,798	\$37,195	12.4	9.9	30.3	8.0		

Because vote centers have only been used in one presidential election in Indiana (and only since 2003 in the US overall), we are prevented from using a randomized large-N design that covers several many cycles. However, our data allows us unique perspective on who is voting. For each county, we construct measures of the voting tendencies of those participating in the 2008 election by aggregating individual level voting data. Our data include the complete Indiana voting histories of the voters in the 2008 general election for all six counties, enabling us to categorize those who voted by the frequency of their participation.³

Additionally, within the Tippecanoe County data, we are able to distinguish between early and regular voters, allowing us to test more refined hypotheses about the effects convenience voting on turnout composition. Obviously, we would prefer to have similar data on the vote histories of early voters in each of our six counties including the non-vote center counties for comparison. However, such data were not available from these counties. Under ideal circumstances, we would prefer to combine individual vote history data with socioeconomic characteristics of the vote in order to engage in an individual level analysis. But, this data does not exist for the entire electorate. Nonetheless, the data allow us to make a contribution to the timely and important discussion about voting methods.

¹ These applications are available at http://www.in.gov/sos/elections/3574.htm (as accessed December 1, 2011).

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² The data used to estimate this model are drawn from the US Census and the Indiana Secretary of State's reported election

³ To test the contention that the unique combination of early voting and vote centers produces these results, it would be preferable to have data on vote center and non-vote center counties both with and without early voting. In practice, this is impossible as no vote center counties operate without early voting.

5. Findings

Testing the first hypothesis, that vote centers will facilitate more early voting, is relatively straightforward. Table 2 compares the proportion of votes cast early between the two county groups (vote center counties and control counties) in the 2008 general election. On average, the percent of votes cast early in vote center counties was 33.9 percentage points higher than the control counties. This difference is not only statistically significant but also substantively large, demonstrating the appeal of the vote center model to voters. Because all six counties allowed no-excuse, early, in-person voting, this demonstrates that the actual convenience of early voting varies dramatically with the method of implementation, in this case vote centers. The question then is whether this enhanced convenience actually increases voter turnout.

TABLE 2: Early voting in control and vote center counties, 2008					
Vote center county	Proportion of votes cast early	Control county	Proportion of votes cast early	Difference (VC - C)	
Cass	0.500	Blackford	0.216	.284	
Tippecanoe	0.497	Delaware	0.148	.349	
Wayne 0.599 Grant 0.215 .384				.384	
Difference of group means .339***					
*** p<.01, t = 8.42, df = 4					

We utilize a double difference method to assess the impact of vote centers on turnout. Following Giammo and Brox (2010), we compare across our county groups the changes in turnout between the 2004 and 2008 elections. We find that the Indiana vote center counties enjoyed larger gains in turnout than the control counties. In Table 3, we compare the gains in turnout of registered voters from 2004 to 2008. The increase in turnout for vote center counties was 9.3 percentage points higher for the vote center counties than for the control counties; this difference was statistically significant. In Table 4, we compare the gains in turnout measured as percentage of the voting age population. This increase in turnout was for vote center counties was 5.1 percentage points higher for the vote center counties than for the control counties; this difference was statistically significant. As the broad national political context and the socio-economic characteristics of the two county groups are constant in this comparison, this suggests that vote centers have a positive effect on voter turnout. This finding is consistent with Stein and Vonnahme (2008) regarding the impact of vote centers on turnout and with Oliver's (1996) finding that liberalization of absentee rules along with other facts can also increase turnout.

Assessing the substantive importance of these differences of this size is not necessarily straightforward. In the model of turnout estimated by Giammo and Brox (2010), a change of roughly 2.5 percentage points constitutes one standard deviation. Using this metric, vote center counties saw increases in registered voter turnout greater than control counties by nearly four standard deviations. The increases in turnout of voting age population were greater for vote center counties by roughly two standard deviations.

TABLE 3: Change in turnout of registered voters from 2004 to 2008					
Vote center county	Percentage gain	Control county	Percentage gain	Difference (VC - C)	
Cass	0.150	Blackford	0.004	.146	
Tippecanoe	0.011	Delaware	0.003	.008	
Wayne	0.099	Grant	-0.027	.125	
Difference of group r	Difference of group means .093*				
* $p<.1$, $t = 2.23$, $df = 4$, one-tailed					

TABLE 4: Change in turnout of voting age population from 2004 to 2008					
Vote center county	Percentage gain	Control county	Percentage gain	Difference (VC - C)	
Cass	0.063	Blackford	0.016	.047	
Tippecanoe	0.099	Delaware	0.032	.067	
Wayne	0.025	Grant	-0.013	.038	
Difference of group means .051*					
* $p<.1$, $t = 2.20$, $df = 4$, one-tailed					

⁴ This gap widens when we compare the voter center counties to all of the other counties in Indiana.

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It is possible our findings regarding turnout may simply reflect an idiosyncratic "Obama effect" of the 2008 elections. The appeal of Obama could have led to greater turnout in counties with more young voters, large minority populations, or more Democratic voters. However, as Table 1 shows, our vote center counties are matched with control counties that are very similar in these measures. Any "Obama effect" on turnout should have hit both county groups fairly evenly.

Similarly, the turnout effect may simply be a transitory spike associated with the novelty of the introduction of a convenience measure. While such a spike could not be driven by early voting which was already in place in the 2004 election, the vote center effect may not be persistent in the long-term. In the absence of data that cover three or more election cycles, it is difficult to discount this possibility. Certainly, future elections will tell whether these turnout effects are persistent. In the meantime, these initial findings speak to the need to keep the debate about vote centers and early voting open, especially given the stakes in county election boards.

If, as Hypothesis 3 suggests, vote centers help increase turnout by drawing reluctant voters rather than simply serving those who would vote anyway, we should observe increases in participation by these types of voters between 2004 and 2008. To test this hypothesis, we use the county level individual vote history data to divide the voters into three groups based on the frequency of their voting. New voters are, as one might expect, those who regardless of their age have not voted in any prior election. This categorization, of course, conflates the chronic non-voter with the young voter. However, below we stratify our analysis of this group by age in order to account for this issue. The second category consists of infrequent voters. To code this variable, we used the 2004 general election results to determine the 33rd percentile of the "times voted" variable for each of the age groupings.⁵ Any individual falling below that number is coded as infrequent, with the exception of new voters. As a result, because the first age range has a 33rd percentile value of one vote, there are no "infrequent" voters for that age range. Finally, we consider all remaining voters who are not either new or infrequent to be in a residual category that we label "regular."

In Table 5, we compare the changes in vote totals from 2004 to 2008 between vote center and control counties. These differences are presented for groups based on age and voting frequencies. For each of these categories, vote center counties enjoyed greater infrequent voters turned out in greater volume in vote center counties. For all but one age group (18 to 24), these differences were greater for infrequent and new voters than for regular voters. These differences between vote center and control counties were statistically significant for the new and infrequent voters in each of the age brackets (with the exception of new voters, 18-24), but only one of the age groupings of regular voters (30-44). This suggests that vote centers increase turnout by increasing the convenience of voting for those otherwise easily dissuaded from doing so. The age breakdown of this effect in Table 5 underscores this inference, particularly given the large gains of vote center counties relative to the control counties among new and infrequent voters in the 30-44 and 45-64 age brackets. Potential voters in these age brackets are most likely to have families to care for and to be employed in full-time regular work. Hence, potential voters in this group are most likely to benefit from more flexible voting arrangements, such as vote centers near their work places and easy access to early voting in order to avoid election days lines.

TABLE 5: Change in vote totals from 2004-2008 by voter type and age					
Aga Panga	Difference in group	Difference in group means between vote center and control counties (VC – C)			
Age Range	New Voters	Infrequent	Regular		
18-29	.255		.441		
30-44	.319**	.235*	.196*		
45-64	.303***	.293*	.059		
65+	.173**	.271*	.072		
Total	.246*	.294*	.113		
* p<.1, **p<05, *** p<.01, one-tailed					

The Tippecanoe data allow a closer look at what is going on behind these numbers. As hypothesis three suggests, infrequent voters who turn out for elections will be drawn by the convenience of early voting at vote centers. This means a large percentage of the infrequent voters who did not vote in 2004 should be observed not just voting, but voting early in 2008 if convenience indeed motivates them.

⁵ The cutoff number of votes (at or below which a voter is considered infrequent) for each group are as follows: 18-29, one vote; 30-44, two votes; 45-64, four votes; 65+, eight votes.

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Indeed, this is what our voting history data shows. In Table 6, we show the level of early voting among infrequent voters between 2004 and 2008 election by age group. In the fifth column, we display the number of infrequent voters who did not vote in 2004 but *voted early* in 2008; overall, 3170 such vote were cast. This is equivalent to 86% of the overall increase in votes by infrequent voters (regardless of age) for Tippecanoe County in the 2008 election.

TABLE	TABLE 6. Tippecanoe Infrequent Voters 2004-2008: Role of early voting in drawing increases					
Age Range	Votes in 2004 General	Votes in 2008 General	Difference (2008-2004)	Infrequent voters who did not vote in 2004 but voted early in 2008	Percentage of 04- 08 difference	
18-29						
30-44	1148	1996	848	621	73.2	
45-64	2204	3148	944	810	85.8	
65+	5831	7690	1859	1739	93.5	
All Ages	9183	12834	3651	3170	86.8	

In Table 7, we summarize the voting method of each type of voter for those who did not vote in 2004. The table presents compelling evidence that early voting was particularly attractive to infrequent voters. Of the voters who did not vote in 2004 but turned out in 2008, the infrequent group voted early in the highest percentage. This suggests the need for further examination of the contention that convenience voting appeals to and serves only the politically engaged.

TABLE 7. Voting method of those who did not vote in 2004 by voter type of Tippecanoe voters.					
Voter Type	Regular/absentee	Early	Total	Percent Early	
New Voters	6061	4569	10630	43.0	
Infrequent Voters	3110	3170	6280	50.5	
Regular Voters	9260	5290	14550	36.4	

To be sure, early voting is still predominantly done by regular voters. Table 8 shows only votes cast by those who did not vote 2004. A total of 33,527 citizens voted early in 2008, 21,692 (or 64%) of whom were regular voters. However, the data suggest that the difference between early and regular voters may indeed be narrower than is thought. Though Table 4 shows that the average early voter has three more prior votes than the average regular voter, the difference diminishes when voting histories are stratified by age. Controlling for age, early and regular voters have very similar prior participation. Consistent with Stein (1998), we find that older voters are more likely to vote early than younger voters; this may represent an information gap between inexperienced and experienced voters concerning the availability and use of early voting facilities. In Tippecanoe in 2008, new voters opted for early voting only 36.4% of the time as compared to 51.4% of those with prior voting records.

TABLE 8. Voting history by age range for Tippecanoe 2008 early and regular voters					
A go rongo	Mean prior votes		Median prior votes		
Age range	Early	Regular or Absentee	Early	Regular or Absentee	
All ages	8.43	5.78	5	2	
18-29	1.00	0.89	1	0	
30-44	3.62	3.22	2	2	
45-64	7.43	6.62	6	5	
65+	13.14	12.20	13	12	

6. The cost of convenience

Although our findings on turnout are preliminary in nature, they are all the more compelling from a policy perspective given that data suggest that the vote center model actually reduces election costs rather than increasing them. These data are drawn from Losco, Scheele, and Vasicko (2010). Measuring election costs is something of a complex process. Governmental accounting practices may vary substantially from county to county. The often used "cost per vote" statistics can be misleading as they are dependent in part on turnout and economies of scale associated with elections. However, election officials must provide polling services regardless of turnout and so face a large threshold of fixed costs when planning an election.

The Indiana experience indicates that vote center counties enjoyed substantial savings in costs they would have undertaken in traditional precinct elections. These savings came largely in three categories.

First, staffing costs constituted by far the largest area of reduced expenses for vote center counties. Operating fewer polling locations results in substantial reduction of personnel needed to operate and to monitor the election. Tippecanoe County officials used 96 full-time workers in the 2007 municipal election as compared to the 260 that traditional precincts would have required. Greater efficiency of staff use resulted in vote center workers serving on average 460 voters in the 2008 election while control county workers served on average 119. Increased early voting added to this efficiency, as staff not required to be present by statute could work shorter shifts as turnout demanded. The greater efficiency of staff use had a ripple effect through related cost categories, reducing set-up time, training costs, meal costs, and overtime.

The second major category of expense reduction is the long-term capital cost of voting machines. As each voting machine in the vote center model handles more ballots than under the precinct model, fewer machines are required, lowering the long-term capital costs of elections. Voting machines generally last ten elections so, of the six counties, only Cass happened to be buying new machines for the 2008 general election. Election officials there estimated that purchasing enough machines for a traditional precinct election would have required an additional \$500,000 of expenditure. Assuming voting machines cost roughly \$5,000 and that each machine has a useable life-span of ten years, each machine adds \$500 to an election's cost. Increasing machine utilization from 165 to 230 voters per machine means that a county expecting 100,000 voters on Election Day can reduce the number of voting machines it must own by 170, a savings of \$85,000 per election.⁶ In addition to lowered capital outlay, counties would also save on transportation, storage, and maintenance.

The third major category where vote centers achieved cost savings was in rental fees for polling locations. In consolidating precincts, vote centers substantially reduce the number of facilities required for polling. Tippecanoe consolidated ninety-two precincts into twenty vote centers for the 2008 general election. The reduced number of locations means that voting can take place in public buildings at no cost to the county, rather than requiring the rental of commercial spaces. Although the savings from rental costs were smaller than staffing and voting machines, they were nonetheless notable. In the 2008 general election, neither Tippecanoe nor Cass needed to pay for rental facilities resulting in savings of \$2400 and \$1000 respectively, while Bartholomew County (which used traditional precincts) paid out \$900 in rent.

Overall, the financial savings from consolidating precincts into vote centers proved to be substantial. To be sure, implementing the vote center model created some expenses that exceeded traditional precinct expenses (e.g., setting up high speed internet connections, etc.). But the data indicate net gains for the vote center counties. The 2007 municipal election cost Tippecanoe County \$56,626 as compared to the estimate of \$75,008 that a precinct election would have cost. With the experience of that election enhancing efficiency, Tippecanoe officials were able reap even greater savings in 2008 spending \$99,851 on vote centers as compared to an estimated \$142,658 for precinct voting. Cass County accrued similar savings spending \$29,000 for its vote centers as compared to an estimated \$59,800 for precinct voting. Quite clearly, vote centers did not constitute convenience for the engaged at the expense of the disenfranchised.

7. Conclusions

Our analysis is admittedly preliminary and our data are in some ways less than ideal. Nevertheless, our findings suggest that vote centers in combination with early voting have the potential to increase turnout and to attract infrequent voters by offering voting opportunities with greater flexibility in time and location. Further, we have shown that vote centers even when used in combination with early voting can result in substantial cost savings for election administrators, leading us to reject claims that vote centers constitute a transfer of state or county resources to the politically engaged. Because vote centers are a recent innovation lacking long-term turnout studies covering multiple election cycles, results of studies such as ours are not yet conclusive. However, we contend that these findings merit keeping the debate on vote centers and early voting open. In short, it is too early to close the books on early voting.

⁶ These estimates are based upon discussions with County Clerks and vendors for voting systems.

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