# Close to Work, Close to Home? An Examination of Where Voters Choose to Cast Their Ballots

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#### Abstract

Participating in elections can be costly. There are both informational and physical costs involved with voting. Parties, candidates and the media can lower information costs, but it rests solely on election administrators to lower physical costs. There are several ways that election administrators can help lower the costs associated with voting such as offering an expanded voting period or alternative voting modes. In addition to offering various voting modes, administrators can adopt the convenience, or vote center model, which allows voters to vote at any voting location. This paper explores how voters use voting convenience centers in a local city election as it was implemented the first time. The results show that convenience matters. Older voters are more likely to vote at the location nearest their home, while younger voters are more likely to vote at a vote center further from their home, but presumably closer to work or school.

It has been said that all politics is local, but when it comes to local elections interest and participation in politics seems very low. Local elections, such as those to elect city council members or vote on city taxes, bonds and propositions often see turnout rates as low or lower than half that seen in presidential elections (Hajnal and Lewis 2003). This is troubling given that on a daily basis, local government directly affects people's lives. When turnout in elections is low concern increases that the needs and interests of many citizens may not be met (Verba, Schlozman, and Brady1995; Rosenstone and Hansen 1993) and increases he likelihood that representation is baised in favor of the resource rich (Wattenberg 1998).

There are several reasons that turnout may be low in local elections, such as the high cost of information about the candidates and issues, the lack of elected officials on the ballot, and the lack of aggressive mobilization efforts or partisan cues for many races.

Another possible deterrent to participation in local elections is the costs associated with casting a ballot. Often, traditional precincts are consolidated for low turnout elections, such as city council or school board elections, and there is little partisan encouragement for early in-person or absentee voting. With the high costs associated with local elections, the cost of seeking out additional information, such as the location of a consolidated precinct, may be just enough that it pushes a voter to make the decision to abstain from participating altogether (McNulty, Dowling, and Ariotti 2009).

One way that state and local governments can lower costs associated with voting is to make it more convenient by offering voters the opportunity to choose when and where to vote. Elections have long used a precinct model of voting, where local election administrators assign voters to a voting location or precinct near their home as the only

physical place where voters can vote on Election Day. In the last decade, more and more cities and states have introduced early voting centers, or locations where voters can cast their ballots in the days or weeks prior to an election, to make voting more accessible to those who have difficulty making it to the polls on Election Day. Election administrators have also introduced the convenience voting center (CVC) model that eliminates assigned precincts and allows voters to vote at any location throughout the city on Election Day. The philosophy behind these changes is simple: when voters are free to choose from a number of alternative modes, locations and times of voting, at least part of the cost of voting is reduced. This paper seeks to explore what happens when cities or states move to a convenience model of voting. Does convenience work as intended? Namely, do people utilize voting locations, beyond those located nearest their home, or do they tend to continue to vote close to home as they did with the precinct model?

## Past Research and Theory of Convenience

It has been well established that voting is a costly activity (Aldrich 1993; Sigelman and Berry 1982; Downs 1957). Early theoretical research concluded that when the costs of voting outweigh the potential benefit of voting, voters would abstain (Downs 1957). Costs have historically been broadly defined to include all activities that take place prior to casting a ballot, such as seeking information about the candidates and issues, making a decision about how to vote, registering to vote and getting to the polls. Later research by scholars such as Niemi (1976) and Aldrich (1993) concluded that some of the costs of voting, such as information gathering and decision making had been overstated and that the cost of getting to the polls was the biggest factor to voters. In fact, Niemi concluded that a small increase in distance, even as small as a half a mile, might be enough to significantly reduce turnout (Niemi 1976, 117). If this is true,

one institutional response to reduce costs is to provide voters the choice to vote wherever it is convenient for them, instead of a single traditional and restricted precinct location.

Research shows that the cost of voting is not felt equally across citizens. Previous studies show that individuals with higher income and more education are more likely to vote than voters with lower income or those with lower levels of education (Verba, Schlozman, and Brady 1995; Rosenstone and Hansen 1993; Leighley and Nagler 1992; Wolfinger and Rosenstone 1980).

Studies have also shown that age is related to voting, with older citizens being more likely to vote than younger citizens (Verba, Schlozman, and Brady 1995; Rosenstone and Hansen 1993; Leighley and Nagler 1992; Wolfinger and Rosenstone 1980).

This is especially important to consider when a state or locality is considering moving to a convenience vote center model. One reason older citizens are more likely to vote is because it is a habit and for retired voters they do not have to bear the costs of working and voting on the same day. Under the convenience model, voters have the choice to vote at the most convenient location and thus may have a greater opportunity to cast their ballot.

When looking at costs associated with voting, it is important not to overlook the institutional design of the election itself. It is often how elections are run that make it costly to voters. It is in the design and implementation of elections where state and local administrators and sometimes state legislatures through legislation can have the biggest impact. Simple changes like expanding voting hours, increasing the number of days that citizens can vote, increasing the ways that a citizens can cast their ballot and carefully deciding where voting locations are placed can all lead to increased turnout (Brady and McNulty 2011; Bryant 2010;

<sup>&</sup>lt;sup>1</sup> However, it has also been found that at very old ages, age may become an obstacle and lead to a decrease in the likelihood of voting (Verba, Schlozman, and Brady 1995; Rosenstone and Hansen 1993; Leighley and Nagler 1992; Wolfinger and Rosenstone 1980).

Gronke 2009; Haspel and Knotts 2005; Stein, Leighley and Owens 2005; Gimpel and Schuknecht 2003). Changing to a convenience vote center model of elections may result in an increase in turnout, but it might also change the way established voters participate.

When voters will have the choice of where, when and in what way to cast their vote, they will likely make choices that are most convenient to them, whether that choice is to vote on Election Day or in the weeks before, and at a location near their home or one across town.

The convenience nature of the CVC model is based on the notion that by providing voters more voting option it will reduce the costs of participation and therefore increase turnout.

Overall, convenience voting has the potential to enhance voter participation. This is especially true for younger, employed or infrequent voters, who may benefit the most from the increased number of voting options. From a policy perspective vote centers may be one of the few ways in which election administrators can reduce the cost of voting.

## The Study Setting

The change from a precinct model to a convenience voting center model was adopted by the State of New Mexico and was provided to local governments as an election option, but not a requirement beginning in 2011 (Allen 2011). The City of Albuquerque was the first to take advantage of the new law, moving from a traditional precinct election model to a convenience voting center model, providing the perfect opportunity to study how voters would choose to respond to the implementation of a CVC only approach to elections. Albuquerque voters were given little notice about the change from traditional consolidated precincts, as was the norm in previous city elections, to CVCs. The city did manage to run a small media campaign in the last few days before the election, but sent no direct mailers and made no direct contact with registered voters to inform them of the

change. Despite the lack of information, an exit poll showed that 87 percent of voters reporting knowing that they could vote in any location and 58 percent reported reading or hearing something about where to vote in the upcoming election (Atkeson, Bryant, Stein, et al. 2011). In previous city elections, voters could vote early-in-person at one of four early voting locations, primarily located in or near downtown Albuquerque; or they could vote on Election Day at their assigned consolidated precinct. For the 2011 election, the city increased the number of early in person voting locations to nine and decreased the number of Election Day precinct polling location from 98 consolidated precinct locations to 49 convenience vote centers. As shown in Figure 1, both early and Election Day voting locations were distributed fairly equitably across the city, with a slightly higher concentration of locations in areas of high employment or council races.

# (Figure 1 about here)

The 2011 city election ballot included city council races for all even numbered districts (2,4,6,8), as well as twelve bonds and one proposition. Incumbents ran unopposed in two of the four council districts (2 and 6) on the ballot. With a lack of competitive races, turnout in the election (11.6%) was much lower than that in the 2009 mayoral elections (25%) (Research and Polling, Inc. 2009) and the little mobilization that did occur was most likely because one of the bond issues and the sole proposition on the ballot were fairly controversial. Bond question 12, known as 'Albuquerque – The Plan', asked voters to support the expansion of a busy freeway intersection in town and support various capital improvement projects. There was wide public support for the Interstate exchange improvement, but voters voted against the bong because it included funding for the sports complex, an issue that voters had struck down previously. The addition of funding for the

sports complex was controversial because it appeared to voters that the mayor tacked the sports complex on to a popular issue to get it passed, since it had no support as a standalone issue.

Possibly more controversial than the sports complex bond issue was the single proposition on the ballot, known as the red light camera proposition. Albuquerque utilized red light cameras at 20 intersections across the city to catch red light runners and reduce the number of accidents. A controversial report on the cameras showed that a reduction in intersection crashes varied by location, and that there was a reduction in the number of serious crashes at intersections, but an increase the number of crashes overall (Guerin 2010).<sup>2</sup> There was no interest group or party mobilization during the election, but the company that held the contract for the red-light program used robocalls, mailers and radio advertising to try and mobilize voters to support the issue (Mills 2011).

#### The Data

To analyze how voters utilized the convenience vote center model, we obtained a complete list of early and Election Day voting locations as well as the voter registration file containing voter history. This included the location of the CVC's where 35,222 Election Day and early voters cast their ballots in the 2011 city election, as well as additional information that may be correlated with voting in general, or with voting location choice, such as a voter's date of birth, gender, and political party registration.

<sup>&</sup>lt;sup>2</sup> The findings of this study were comparable with studies done on red light cameras in other cities.

Using ArcGIS, we calculated distance from the voters' physical address to all 50 voting centers to determine which location was closest to the voter's home.<sup>3</sup> Distance was determined using a straight-line distance measure, which calculates the distance in feet from the centroid of the voter's home cell to the centroid of the voting center.<sup>4</sup> ArcGIS has the ability to calculate distance traveled along roads, but previous research shows that the minor difference between straight-line distance and roadmap distance estimates in urban areas is trivial and does not improve the distance estimates enough to justify the significant increase in the time and labor required to map and calculate road distances (Wolfinger and Rosenstone 1980; Rosenstone and Hansen 1993). After geocoding in ArcMap, the match rate, or the number of voters matched to an address in the Albuquerque streets GIS file was 98 percent. This resulted in dropping 532 Election Day voters and 243 early voters from the analysis. The final population contains 24,810 Election Day voters and 9,637 early voters.<sup>5</sup>

The dependent variable of interest for measuring how voters are utilizing convenience centers is a dichotomous variable indicating whether not a voter voted to the location nearest their home, where 0 represents voting at a location other than that nearest their home and 1 represents voting at the location nearest their home. Using the location nearest the voters home is based on the idea that in the precinct model of voting, voters are assigned to vote at a precinct location that is located near their home. If convenience is

<sup>&</sup>lt;sup>3</sup> There were 49 Election Day voting centers and 9 early voting centers. Only one early voting center, the one located at City Hall, was not used for Election Day, which resulted in 50 vote centers in total.

<sup>&</sup>lt;sup>4</sup> Distance was calculated in feet because the streets shape file used by the City of Albuquerque is projected in feet. Distances were converted in to miles for analysis.

<sup>&</sup>lt;sup>5</sup> Non-voters and absentee voters were not included in the analysis, since our interest is in how voters are utilizing the convenience vote centers and not just on convenience voting in general.

allowing voters to vote at any voting location, we expect that some, but not all, voters will choose to vote at locations closer to work, or schools, both on their traditional driving route, or other 'convenient' locations over the location nearest their home, as they have grown accustomed to under the precinct model.

Additional variables in the analysis include a voter's age, voting history in past city elections, political party as registered and gender. Table 1 shows variable descriptives for both early in person and Election Day voters. We expect that age may matter for where people choose to vote, with the expectation that 'convenience' may mean close to home for older voters, who are more likely to be retired and have a habit of voting near their home. Voting history is included as the variable 'past frequent voter' which codes variables as a 1 if they voted in both the 2007 and 2009 city elections. Because voting is habitual (Gerber, Green and Shachar 2003; Pluzer 2002; Green and Shachar 2000; Blaise et al 1999), it is expected that having voted in the past will be positively related to voting at the location nearest their home. This is based on the idea that voters may also have become accustomed to or developed the habit of voting in a precinct location near their home. There is no reason to expect that gender or political party would matter in determining where a voter choses to vote, but are included in the analysis simply for matters of curiosity and control.

## (Table 1 about here)

In the analysis that follows, models and summary statistics are reported for both early and Election Day voters. The voters were separated for two reasons. First, early-in-person voting has grown in popularity over the last decade and has surpassed absentee voting as the second most common method of voting in New Mexico. Based on previous

<sup>&</sup>lt;sup>6</sup> The analysis was also run including voting in 2007 and 2009 as separate dummy variables and the results changed very little.

research, there is reason to expect that early voters may differ, especially in terms of age, from those who vote on Election Day (Bryant 2010, Lyons and Scheb 1999, Stein 1998). Second, because there were only 9 early voting locations compared to 49 Election Day locations, it is expected that early voters will have to travel further to cast their ballot. Early voting locations were also not distributed throughout the city as well as the Election Day sites and so the limited choices in early voting make them somewhat qualitatively different.

## **Analysis Results and Discussion**

Using the annotated voter file and GIS we first examined where people voted. An average of 507 voters voted at each location on Election Day and the early voting locations had an average of 1,071 voters over 13 days. The three most utilized Election Day vote centers were all located in the far Northeast section of the city and had over a thousand voters each, with the most frequented voting center having 1,352 voters on Election Day, which comprised 5.5 percent of all votes cast that day. The three most utilized centers were all located within districts that had competitive council races (4 and 8). The same held true for two of the three most utilized early voting locations. Interestingly, most of these locations are not high employment areas, but rather located in largely residential neighborhoods, with one being located in a shopping center.

When looking at how far voters traveled to vote, there are sizeable, although expected, differences in Election Day and early voters. As Table 2 shows, the average distance an Election Day voter traveled to a vote center was 1.73 miles, while the average early voter traveled 2.42 miles to cast their ballot. Figures 2 and 3 show the distribution of distance voters traveled to vote. Figure 2 shows that over 75 percent of Election Day

<sup>&</sup>lt;sup>7</sup> Early voting took place M-F, 8am-5pm from September 30, 2011 through October 30, 2011.

voters traveled less than two miles from home to cast their ballot, while Figure 3 shows that only about 55 percent of early voters cast their ballot within two miles of home.

Overall, early voters had a slightly smaller range of distances traveled to cast their vote.

Early voters traveled anywhere from one-tenth of a mile up to fourteen and a half miles to cast their ballot, while Election Day voters ranged from under one-tenth of a mile up to nearly sixteen miles.

## (Table 2 about here)

GIS distances show us that the average distance a voter lives from the closest Election Day voting location is .66 miles and the furthest distance a voter lives from the nearest location is approximately 2.6 miles. The average distance for a voter from an early voting center is approximately 1.62 miles, with the furthest distance being 4.68 miles. This demonstrates that the cost of traveling to a voting location was far less for Election Day voters than for early voters, however the convenience of a two-week long window of voting lowers the cost somewhat.<sup>8</sup> Although it is interesting to know how far voters are traveling to cast their ballot, we are more interested in how voters are utilizing the convenience model.

#### (Figures 3 and 4 about here)

To further examine the notion of convenience in voting, we examine several covariates to determine who voted at the locations nearest their home. The covariates used in the analysis, which is presented in Table 3, are prior voting history, partisanship, age, and gender. In the models for both Election Day and early voters, age played a large

<sup>&</sup>lt;sup>8</sup> It may seem that the cost of traveling and extra mile, on average, is not much, but when considering that Brady and McNulty (2011) measured distance in hundredths of miles and found that increased distance can lower voter turnout (p.124), those miniscule costs of travel become important.

role in whether or not a voter voted at the location nearest their home. The base category left out was voters over 70 years old, which comprised approximately 33 percent of the sample. The results show that the younger the voter, the more likely they were to vote at a location other than that nearest their home. Election Day voters over 70 were nearly twice as likely to vote at the location nearest to their home than those under 40, and voters over 70 were two-thirds more likely to vote at the early voting location closest to home. This finding suggests that convenience is working as intended for all voters, even when they are voting near home. Those who are likely to be out at work on Election Day, such as 20 to 40 year old voters, are using vote centers that are not necessarily closest to home, while older citizens such as those over 70, who are likely to be retired and stay close to home are using the closest, most convenient, vote center.

## (Table 3 about here)

Having a history of voting in city elections also played an important role in whether or not a voter voted at the location nearest their home. Election Day voters who have cast ballots in multiple city elections over time were nearly thirty percent more likely to vote at the location closest to their home than those who had not previously voted in city elections. This suggests that those who were accustomed to and familiar with the precinct model are primed to vote near home. Interestingly, the findings were the opposite for early

<sup>&</sup>lt;sup>9</sup> To check for a relationship between age and voting history, we ran an interaction model. The interaction between age and being a frequent past voter was not significant. The interaction model was run to examine the possibility that being a past voter was significant simply because the voting population in city election tends to be older voters, and was therefore capturing the effect of being older. Because the interaction was insignificant, we conclude that there does appear to be a relationship between having a voting history and voting at a location near home.

voters. Thirty percent of the voters who voted early in 2011 had also voted early in 2009. 10 The reason that early voters differ from Election Day voters may be tied to this previous experience as an early voter in city elections. In the 2009 city election, the city had only four early voting locations, so most early voters had to travel a fair distance to cast their ballot early. Additionally, with the continuing increase in the number of early voters in New Mexico, early voters are likely to know that early voting is not precinct specific. This working knowledge of how early voting works may lead early voters to be more likely to vote at an early voting location that is not closest to their home.

Political party affiliation appears to matter in both models as well, with Republicans being more likely than Democrats to vote at a location other than the one closest to their home on Election Day. The opposite is true for early voters, with Republicans being more likely than Democrats or Independents to vote at the early voting location that is closest to their homes. This finding is more likely to be related to the placement of early voting centers and partisan Tiebout sorting in Albuquerque than any real "partisan" effects created by the parties themselves (Tiebout 1956). While the city is divided fairly evenly in terms of partisanship, there are pockets of neighborhoods throughout the city that are more partisan than the rest. Republicans tend to live in the far Northeast areas of the city, where two of the three most used early voting sites were located, and near the Air Force base, where the third most used early voting site was located. Democrats tend to be clustered in the South Valley and on the Westside, both are areas that did not have any city council races, had fewer red-light cameras in operation and had few early voting locations.

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<sup>&</sup>lt;sup>10</sup> Early vote cannot be calculated for 2007 because the city combined the vote mode for early and absentee in the voting history at that time. Also, early voting was extremely limited in the 2007 city election, in terms of available locations.

Given these factors, it would be difficult to make any claims that parties or partisanship had much to do with the differences that appear in the results.

#### Conclusion

Examining where voters cast their ballot when given the choice to vote anywhere, we find that convenience is working, but convenience varies by voter. There is a significant and almost stacked effect that shows that the younger a voter, the more likely they are to vote at a location that is not near their home and that older voters are much more likely to vote near where they live. When thinking of what convenience means to voters, this makes sense. It would be convenient for older voters, who are likely retired and may not have errands across town to choose to vote near where they live. It also makes sense that younger voters are more likely to have reasons, such as work, school, children and errands that would take them further away from home on a work day. Our results show that it appears that voters are utilizing the convenience that was intended by the design of convenience vote center approach to elections by voting at the locations that work best for them.

What is important about convenience is that it lowers the costs of voting to citizens by providing them more time and opportunities to participate in elections and cast their vote. When more people are participating, we expect better representation by elected officials and more representative policies to be put in place. Finding ways to increase turnout, if even by a few percentage points is important in all elections, but nowhere may it be more important than in local elections where turnout is often the lowest. While cities may not be able to affect some of the costs of voting, such as information or decision making, they can certainly help lower the costs to voters by increasing opportunity.

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**TABLE 1. Variable Descriptives** 

	Election Day Voters	Early Voters
Voted at Nearest Location	51%	67%
Age (mean/median)	58/59	64/66
Female	49%	49%
Democrat	48%	44%
Independent/DTS	10%	10%
Republican	41%	46%
Voted in 2007 City Election	37%	46%
Voted in 2009 City Election	77%	83%
Frequent City Election Voter	34%	44%

TABLE 2. Distance Traveled to Consolidated Vote Centers by Early and Election Day Voters

	Miles Traveled to Consolidated Voting Center by Voters					
	Ave.	10%	25%	50%	75%	90%
Election Day Voters	1.73	.29	.49	.88	1.71	4.36
Early Voters	2.42	.62	1.08	1.86	3.04	4.84

TABLE 3. Logistic Regression Results of Characteristics of Voting at Polling Place Nearest to a Voter's Home

	Election Day Voters		Early Voters		
	Coefficient (std errors)	Odds Ratios	Coefficient (std errors)	Odds Ratios	
Age: 18-40	614*** (.046)	.541***	-1.156*** (.100)	.315***	
41-60	338*** (.036)	.713***	570*** (.058)	.565***	
61-70	144*** (.039)	.866***	123** (.056)	.884**	
Past City Election Voter	.251*** (.028)	1.285***	235*** (.047)	.790***	
Democrat	.060** (.027)	1.062**	290*** (.047)	.748***	
Independent/DTS	.022 (.045)	1.002	179** (.077)	.836**	
Female	026 (.026)	.974	.071 (.044)	1.073	
Constant	.215*** (.037)	1.239*** (.045)	1.226*** (.058)	3.406*** (.196)	
N	24810	24810	9637	9637	
LRchi2	372.32***	372.32***	254.02***	254.02***	

<sup>\*\*\*</sup>p<.01, \*\*p<.05, \*<.10











