Why Are Voting Lines Longer for Urban Voters?

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Introduction

Long voting lines have received renewed attention in the wake of the 2012 presidential election. News reports indicated that some voters in Florida and Virginia waited several hours, even late into the night, to cast their ballots (Heath 2012; King 2012). This has prompted calls to examine the sources of long lines at polling places (Cal Tech/MIT Voting Project 2013). President Obama mentioned the need to "fix" the problem of long voting lines in his victory speech on election night and in his State of the Union address in February of 2013. Furthermore, President Obama formed a commission to examine the voting experience in the United States, with a particular focus on improving the customer service side of that experience (Zeleny 2013). Thus, there may be an opportunity to do something about long voting lines, provided that we have a good idea about where they occur and why. That knowledge is somewhat lacking at the moment (for exceptions see Stein and Vonnahme 2012; Stewart 2012), and this study seeks add to the knowledge base.

Voting wait times is one of an expanding set of measures of the voting experience. A growing body of evidence indicates that voting lines in presidential elections are positively associated with the size of the local jurisdiction administering the elections. The longest voting lines tend to occur in the most heavily populated urban jurisdictions (Stewart 2012; Peters 2013). This study examines the length of voting lines based on evidence from two national surveys of voters in the 2008 election. The data indicate that voters in the most populated local jurisdictions report a more impersonal and problematic voting experience than voters in smaller jurisdictions, including longer voting lines. The length of voting lines

goes a long way toward explaining why urban and minority voters tend to offer more critical evaluations of poll worker performance. However, it is not clear why voting lines tend to be longer in heavily populated jurisdictions.

Local Election Administration and the Voting Experience

Many have commented on the decentralized nature of election administration in the United States (Gerken 2009; Tokaji 2009; Hasen 2012). Many important decisions in the management of elections (including purchasing voting equipment, printing ballots, selecting polling places, and hiring and training poll workers) are made by local officials in more than 7,000 local jurisdictions throughout the country. Thus, many decisions affecting the voting experience are made by local administrators.

What is perhaps less appreciated is that local jurisdictions vary tremendously in the size of the voting population they serve. Most of the local jurisdictions that administer elections in the United States (counties or municipalities) serve small voting populations, while a small number of local jurisdictions in heavily populated metropolitan areas serve very large voting populations. Approximately 70 percent of registered voters reside in just 5 percent of the local jurisdictions that administer elections (Kimball and Baybeck forthcoming). While heavily populated local jurisdictions can achieve economies of scale in election costs (Hill 2011), the scope of the administrative task is more daunting in large local jurisdictions. In addition, densely populated urban jurisdictions tend to have higher concentrations of racial and ethnic minorities, as well as a younger and more mobile population.

The decentralized nature of American democracy means that a relatively small number of heavily populated local jurisdictions face a disproportionate share of election administration challenges. These difficulties are concentrated in two key areas: (1) keeping an accurate list of registered voters and their contact information; and (2) managing poll workers and the polling places where they work. Administrative data gathered from states and localities indicate that problems such as invalid and inactive registrations, undeliverable mail, and rejected ballots (from absentee, UOCAVA, and provisional voting) occur at higher rates in large urban jurisdictions (Kimball and Baybeck forthcoming). In addition, election officials in large jurisdictions report substantially more challenges than their counterparts in smaller jurisdictions when it comes to managing elections, particularly when it comes to recruiting and training poll workers. As a result, local officials in large jurisdictions engage in more innovative election practices and express greater support for election reforms, such as early voting and voting centers, that might help them better serve a large voting population (Kimball and Baybeck forthcoming; Kimball et al. 2010).

To summarize, administrative data and surveys of local election officials indicate that administrative difficulties occur more frequently in large local jurisdictions. If these findings are valid then surveys of voters should also reveal more voting difficulties in heavily populated local jurisdictions. This study aims to fill that gap by merging data on the size of local jurisdictions and some of their administrative features with surveys measuring the voting experience.

The Voting Experience and Wait Times

Inspired by data-based performance measures in other fields, there is a movement to develop measures of election administration (Gerken 2009; Pew 2013). Performance measures can identify areas in need of improvement and inform lawmakers considering election reform legislation. A rapidly expanding set of election administration performance measures are based on surveys of voters in which they are asked about the voting experience. A "voter confidence" measure, in which voters are asked how confident they are that their vote was counted as they intended, is one example. Initially inspired by questions about the reliability of different types of voting equipment, voter confidence is now viewed as an overall evaluation of the voting process (Stewart 2009).

One study suggests that voter confidence is a predictor of turnout. In addition, there is considerable variation in voter confidence, with losing partisans, absentee voters, and racial and ethnic minority voters offering among the lowest confidence ratings (Alvarez, Hall, and Llewellyn 2008). Other studies produce similar findings (Alvarez et al. 2012; Gronke 2012). Voter confidence in elections is influenced by voter assessments of poll workers and local election officials who serve them on Election Day (Atkeson and Saunders 2007; Hall, Monson and Patterson 2009; Claassen et al. 2012). Better prepared and more confident poll workers inspire more voter confidence.

Another set of survey questions ask voters to evaluate poll workers and polling place conditions. Despite the rapid growth in early and absentee voting, most voters still cast their ballot at a polling place on Election Day, where they are typically served by

¹ For an excellent summary of many of these measures and data sources, see Pew Center on the States (2012).

citizen poll workers who are hired just for that day. Among their many duties, poll workers open and close polling places, sign in voters, hand out ballots, troubleshoot registration problems, and make sure the voting equipment works properly. On Election Day, poll workers have a great deal of discretion and make many judgments about who gets to vote and who does not (see Alvarez and Hall 2006; Baybeck and Kimball 2008).

Recent studies point to the importance of poll worker recruitment and training. Effective poll worker training programs can influence the performance of poll workers and their job satisfaction (Hall, Monson and Patterson 2007). Another study compares voting to a customer service encounter and finds that voter evaluations of poll worker performance are shaped by conditions at the polling place and interactions with the poll workers (Claassen et al. 2008). In the same study, poll workers who were more confident about their training were given higher performance ratings by voters (Claassen et al. 2008).

A third set of measures ask voters to report whether they encountered specific problems in registering to vote, checking in at a polling place, or casting their ballot (for example, CalTech/MIT Voting Technology Project 2001; Pew Center on the States 2012; Stein and Vonnahme 2012). For example, one study found most voting problems to be rare events in the 2008 presidential election (Alvarez et al. 2012).

One administrative issue that has been debated extensively involves the type of identification voters need to produce when they check in to vote. Some states have recently passed laws requiring voters to show photo identification (such as a driver's license). It appears that identification requirements are not enforced consistently (Alvarez et al. 2012). When considering the nation's poor history of voting barriers, it is a concern that

African American and Hispanic voters are asked to show photo identification more often than white voters (Cobb, Greiner, and Quinn 2012; Alvarez et al. 2012).

While administrative difficulties related to voting have not received much scholarly attention, the problem that has perhaps received the most attention recently is the amount of time voters wait in line at the polling place. One study applies a customer service framework to voting – if the work rate of poll workers checking in voters cannot keep up with the pace of arriving voters, then long lines will develop (Spencer and Markovits 2010). Their key finding is that service times for checking in voters and getting them to complete a ballot did not vary during the day. Long lines developed when those service times were inadequate to handle the high volume of voters arriving at polling places late in the day. They also found that voters were more likely to leave when the lines got longer (Spencer and Markovits 2010). Another study finds that voting lines are longer when not enough voting machines are assigned to high-traffic polling places (Highton 2006).

Others have found that waiting times are not uniformly distributed across the electorate. For example, lines tend to be longer for early voting than for Election Day voting (Alvarez et al. 2012; Stewart 2012; Stein and Vonnahme 2012). In addition, waiting times tend to be longer for non-whites, new voters, Democrats, and people who have recently moved (Stewart 2012; Stein and Vonnahme 2012). Stein and Vonnahme (2012) also find that states with more voting options (such as early voting or no-excuse absentee voting) tend to have shorter voting lines.

More to the point of this study, there is evidence that voting lines in presidential elections are, on average, longer in heavily populated local jurisdictions (Stewart 2012;

Peters 2013). There are several reasons to believe that the voting experience in general would tend to be more negative in large urban local jurisdictions. Large jurisdictions usually serve more voters per polling place (Kimball and Baybeck forthcoming). The administrative difficulties of keeping track of a younger and more mobile electorate may cause the check-in process to be lengthier in large local jurisdictions. Furthermore, local election officials in heavily populated jurisdictions report more partisan conflict and other difficulties associated with polling place operations (Kimball et al. 2010; Kimball et al. forthcoming). Finally, local officials in heavily populated jurisdictions tend to give lower performance evaluations of their own poll workers (Kimball et al. 2010).

Aside from the studies of voting lines noted above, research on the voting experience has not examined whether urban voters report more challenging conditions in the voting process. The next sections describe the data I use to study the relationship between jurisdiction size and the voting experience more directly.

Data and Methods

I examine two national surveys of voters shortly after the 2008 presidential election: (1) the 2008 Survey of the Performance of American Elections (SPAE); and the 2008 Cooperative Congressional Election Study (Ansolabehere, CCES 2008). Both surveys asked a similar set of questions about the voting experience in the presidential election. The SPAE sampled 200 registered voters from each state and surveyed them over the Internet, facilitating comparisons among the states. The CCES surveyed a national sample of 32,800 registered voters (via the Internet) so that each state's share of the CCES sample

 $^{^2}$ The SPAE sample includes an additional 2,000 respondents from ten states who were interviewed by telephone.

is roughly proportional to its share of the population. For the analyses reported below I applied sampling weights to the data from both surveys.

I used the state, county, and zip code variables in each survey to match each survey respondent to her local jurisdiction. In studies of the voting experience it is important to match voters to the local geographic unit that administers their elections. The local election administrator is often responsible for purchasing voting equipment, printing ballots, hiring and training poll workers, and selecting and preparing polling places – many of the factors that determine the conditions faced by the voter. By matching survey respondents to their local jurisdiction I was able to merge some characteristics of the local jurisdiction (especially the size of the local voting population) with the survey data. I also merged some administrative characteristics of the local jurisdiction (the number of precincts and polling places, and the use of e-poll books for checking in voters) with the survey data.

The measure of jurisdiction size is the number of ballots cast in the 2008 presidential election in the jurisdiction. To ease in the presentation of some of the results below I have condensed the jurisdiction size measure into five categories: (1) less than 10,000 voters; (2) between 10,000 and 50,000 voters; (3) between 50,000 and 100,000 voters; (4) between 100,000 and 500,000 voters; and (5) more than 500,000 voters. Each successive category is roughly double the size of the one preceding it, somewhat akin to a natural log transformation of the original jurisdiction size measure.

Data Analysis

I begin by analyzing non-voters in the SPAE data. Only five percent of the registered voters in the SPAE sample reported not voting in the 2008 presidential election. However,

the survey presented non-voters with a list of potential reasons for not voting and asked if each was a "major factor," a "minor factor," or "not a factor" in their decision not to vote. Some of the reasons queried included personal factors, such as illness or not liking any of the candidates. Mentions of these personal reasons for not voting were the most common given (Alvarez et al. 2012) and did not vary by the size of the local jurisdiction. The survey also asked about administrative reasons for not voting. Some administrative reasons dealt with absentee ballots (e.g., whether the ballot was received at all or on time) while other administrative factors dealt with issues more specific to polling place voting, such as the line being too long, having the wrong form of identification. The other administrative issue, registration problems, could apply to any mode of voting. Table 1 indicates the percentage of voters in each jurisdiction size category who stated that a particular administrative issue was "not a factor" in explaining their failure to vote.

[Table 1 about here]

Five different administrative reasons for not voting are displayed in Table 1. In general, large majorities of respondents indicated that each administrative issue was not a factor in their failure to vote. However, administrative issues were least likely to be mentioned by respondents in the smallest local jurisdictions. Each administrative issue was more likely to be mentioned as a reason for not voting by respondents in larger jurisdictions. For each reason listed in Table 1, the relationship between jurisdiction size and the response given is statistically significant (p < .05). For example, 81 percent of respondents in the smallest jurisdictions but just 61 percent of respondents in the largest jurisdictions reported that long lines were not a factor in explaining their failure to vote in

the 2008 election. We observe differences between the jurisdiction size categories of a similar magnitude for the other administrative reasons for not voting listed in Table 1. These results suggest that administrative features are disproportionately preventing a small share of urban voters from participating in presidential elections.

Next I turn to voters in the 2008 election and several measures of the voting experience from the SPAE data. Table 2 indicates the percentage of respondents in each jurisdiction size category reporting a particular voting experience noted in the left-most column in the table. For example, the first row shows that early voting and absentee voting are much more common in heavily populated local jurisdictions. In the two smallest jurisdiction size categories more than 70 percent of respondents voted at a polling place on Election Day, while barely half of respondents in the largest local jurisdictions voted in person on Election Day. One might think that Election Day voting in large jurisdictions is relatively less hectic if fewer voters are using that mode of voting. On the other hand, perhaps voters in large jurisdictions are shifting to early and absentee voting because they are less satisfied with the experience of Election Day voting. It is hard to tell which conclusion is warranted, but voters in large jurisdictions tend to offer a less rosy assessment of polling place conditions than other voters.

[Table 2 about here]

The SPAE included several questions about polling place conditions (rows two through five in Table 2). Again, large majorities of voters offer very positive evaluations of their polling place and the poll worker that served them. However, voters in the largest jurisdictions were less prone to high praise than voters in the smaller jurisdictions. When

comparing the share of voters offering the highest rating, conditions in the largest jurisdictions score about ten percentage points lower than in the smallest jurisdictions. Finally, polling places tend to be more impersonal in large jurisdictions, as relatively few voters in urban areas know the poll worker who served them.

The SPAE also queried voters about specific challenges that may occur when voting (registration problems and being required to show photo identification). As Table 2 indicates, voters in the smallest jurisdictions were less likely than other voters to report having to show a photo ID. Among those who were required to show a photo ID, more than 90 percent were allowed to cast a regular ballot, although that percentage is slightly lower for voters in the largest jurisdictions. Very few voters reported registration problems when they voted. However, among voters with registration problems, those in large jurisdictions were substantially less likely to cast a regular ballot (and more likely to cast a provisional ballot) than voters in smaller jurisdictions. These results are consistent with other data showing that provision ballots are cast disproportionately in heavily populated local jurisdictions (Kimball and Baybeck forthcoming).

The final two measures reported in Table 2 are from SPAE questions on voter confidence and voter waiting times. Again, while revealing a generally positive voting experience, the data reveal a less positive experience for voters in large jurisdictions. Extreme confidence that votes were counted as intended is nine percentage points lower among voters in the largest jurisdictions versus than among voters in the smallest jurisdictions. Similarly, twenty percent of voters in the two largest size categories (comprising almost half of the sample) reported waiting more than 30 minutes to vote, as

compared with just three percent of voters in the smallest jurisdictions who waited more than 30 minutes. While the jurisdiction size differences in the voting experience measures reported in Table 2 range from tiny to something more substantial, they all go in the same direction. Voters in large jurisdictions seem to face a more difficult voting experience.

To help determine the reliability of the findings in Table 2, I conducted a similar analysis of voting experience measures by jurisdiction size for the 2008 CCES survey. Like the SPAE, the CCES surveyed voters shortly after the 2008 election. To facilitate comparisons across the two surveys, several of the CCES voting experience questions used the same wording as in the questions in the SPAE. Table 3 is laid out in a similar fashion as Table 2 – it reports the percentage of CCES respondents in each jurisdiction size category reporting a particular voting experience noted in the left-most column in the table.

[Table 3 about here]

In general, the figures in Table 3 are remarkably similar to those in Table 2. Voters in larger jurisdictions are less likely than others to cast a ballot in person on Election Day. Voters in small jurisdictions are less likely to be required to show photo ID. Among voters reporting registration problems, those in large jurisdictions were less likely to cast a regular ballot than their counterparts in smaller jurisdictions. Finally, voters in large jurisdictions were more likely to face long waiting times.

Another nice feature of the CCES data is that researchers validated the registration and turnout status of all respondents in the sample. The bottom section of Table 3 reports some of those validated measures by jurisdiction size. Despite reports of a less positive voting experience in large jurisdictions, the validated turnout rate is a few percentage

points higher in the two largest local jurisdictions. My hunch is that voter turnout is influenced more by the mobilizing efforts of presidential campaigns and political parties than by election administration. The somewhat higher voter turnout in large jurisdictions may be due to the fact that presidential campaign visits and television advertising are directed disproportionately at voters in heavily populated metropolitan areas (Chen and Reeves 2011; Kimball and Baybeck forthcoming).

The validated registration measures indicate that fewer respondents in large jurisdictions are on active status. Voters on inactive status may not appear in the poll book at the polling place and may need to cast a provisional ballot instead of a regular ballot. Similarly, a higher proportion of voters in large jurisdictions could not be matched to other databases. This is consistent with other data showing higher rates of registrations with undeliverable mailing addresses in heavily populated local jurisdictions (Kimball and Baybeck forthcoming). Overall, both surveys indicate that voters in heavily populated jurisdictions tend to face a somewhat more problematic voting experience.

I next turn to assessing some explanations for the more jaundiced evaluations of the voting experiences of non-white voters and voters in large jurisdictions. Other studies observe that non-white voters, who tend to be concentrated in heavily populated local jurisdictions, report less glowing polling place evaluations than white voters (Alvarez et al. 2012; Stein and Vonnahme 2012). I hypothesize that urban and non-white voters have less positive assessments of polling place conditions because of longer lines and the more impersonal nature of the polling place in urban areas (as shown in Table 2). Stein and Vonnahme (2012) already note a relationship between voting lines and polling place

evaluations. Voters who wait longer to vote tend to rate polling place conditions more negatively. I also expect that knowing the poll worker who checked the voter in will lead to more positive evaluations of the polling place.

To test these notions I estimate a logit model of evaluations of the polling place using the SPAE data. The dependent variable indicates whether or not the voter reported that the polling place was run "very well," the most positive response option offered. As Table 2 indicates, large majorities of voters indicated that the polling place was very well run. The first model employs just two independent variables – one denotes the race of the voter (i.e., white or non-white) and the other indicates the size of the local jurisdiction (the natural log of ballots cast in the 2008 election). The model estimates are reported in Table 4. The results indicate that white voters offer slightly more positive assessments of polling place conditions while such assessments become more negative as the size of the local jurisdiction increases.

[Table 4 about here]

The second model of Table 4 adds two control variables. One variable is a five-category ordinal variable indicating how long the voter waited in line. The second is a dummy variable indicating whether the voter knew the poll worker that checked him in at the polling place. As expected, the model estimates indicate that voters who knew the poll worker that served them offered more positive assessments of the polling place. More importantly, when controlling for waiting times and familiarity with the poll worker, race and jurisdiction size no longer are statistically significant predictors of polling place evaluations. Although not reported here, I find a similar pattern of results when examining

voter evaluations of the poll work that served them. Longer lines and a less familiar polling place environment tend to account for the less positive evaluations offered by urban voters.

This pattern of results invites an examination of waiting times, to explain why urban voters tend to wait longer to vote. I use a similar analytical strategy to see if other control variables reduce the impact of race and jurisdiction size on waiting times. I control for several variables identified as predictors of voting lines in other studies (Alvarez et al. 2012; Stein and Vonnahme 2012). These include indicators for early voters, habitual voters, and voters who have moved recently. I also control for a measure of a state's openness to alternative modes of voting. Stein and Vonnahme (2012) show that states with more voting options tend to produce shorter waiting times. Two additional control variables indicate whether the voter experienced a registration problem or was required to show photo identification. I expect that both events are likely to prolong the waiting period. Finally, Stein and Vonnahme (2012) examine whether the consolidation of polling places is associated with shorter voting lines, and they use a state-level measure of consolidation. Since I have matched the voters in the surveys to their local jurisdiction I instead use a local measure of consolidation – the ratio of precincts to polling places. This measure comes from data in the 2008 Election Administration and Voting Survey (U.S. EAC 2009).

The dependent variable is an ordinal measure with five waiting time categories: (1) not at all, (2) less than 10 minutes, (3) 10-30 minutes, (4) 30 minutes to an hour, and (5) more than an hour. Given the ordinal nature of the dependent variable, I estimate an ordinal logit model of waiting times. The model estimates are reported in Table 5. The first

model verifies that, absent controls, non-white and urban voters tend to face longer voting lines.

[Table 5 about here]

The second model in Table 5 includes the control variables, and the coefficient estimates are in the expected direction for most of them. Early voters and those who have moved recently tend to wait longer to vote. Habitual voters and those in states with several voting options tend to face shorter voting lines. Voters who encounter a registration problem or are asked to show a photo ID tend to report longer wait times. Finally, the association between local polling place consolidation and waiting times is as predicted by Stein and Vonnahme (2012). In jurisdictions with a higher ratio of voting precincts to polling places voters report shorter waiting times.³

Finally, adding the control variables to the model do not alter the coefficient estimates for the size of the local jurisdiction. There are several potential explanations for longer voting lines in heavily populated jurisdictions. Among these hypotheses: (1) poll workers are unable to keep pace with a large volume of voters; (2) a disproportionate share of registration and identification problems prolong the voting process; (3) local officials don't have enough voting machines to serve voters in a timely fashion; (4) poll workers are worse in large jurisdictions. It is clear that voting lines are longer in heavily populated jurisdictions but it is not clear why.

³ I examined a different measure of consolidation, the average number of voters per polling place in the local jurisdiction, and found similar results.

Conclusion

A flourishing movement to measure election performance offers tremendous opportunities to pinpoint election laws or administrative practices that can be improved. To date, these efforts have been most successful for comparing election administration at the state level (Pew Center on the States 2013; Burden and Stewart forthcoming). However, election performance measures can also be used to examine local variation. While urban voters are generally not facing third-world voting conditions, the evidence in this study supports the claim that urban voters contend with a disproportionate share of voting difficulties in the United States. While the differences in the reported voting experiences of voters in large versus small jurisdictions are sometimes small, they seem to be unusually persistent across a wide range of measures from two different national surveys of voters.

One possible threat to the validity of this conclusion is if residents of heavily populated cities (such as New York, Boston, and Philadelphia) are simply more impatient and more apt to complain about life (and voting conditions). While I cannot rule out that explanation yet, the results from the voter surveys in this study are consistent with other non-survey data indicating that voting problems occur more frequently in large jurisdictions. In addition, since this is a cross-sectional study it cannot offer very confident conclusions about policy changes that would reduce voting lines.

Nevertheless, registered voters in large jurisdictions more frequently mention administrative issues as reasons for not voting. Voters in large jurisdictions describe a somewhat more impersonal voting experience and tend to offer more critical assessments of polling place conditions. Finally, voters in large jurisdictions tend to face longer voting

lines and are more likely to report registration and identification problems. While the evidence does not support a simple explanation for voter waiting times, we do know where long lines, and other voting problems, are most likely to occur: in heavily populated metropolitan areas. Those interested in improving the voting experience in the United States know where to look. Rick Hasen (2012) has written a well-received book about the "voting wars," referring to the frequent partisan disputes among lawmakers and activists over election laws and reform proposals in the United States. Hasen argues that decentralized election administration combined with these partisan battles contribute to a dysfunctional election infrastructure. Hasen gives the impression that the voting wars are being waged throughout the country. However, perhaps the voting wars are really about something more specific: the conditions confronting urban voters when they try to register and cast their ballot.

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Table 1
Administrative Reasons for Not Voting by Size of Local Jurisdiction 2008 General Election

Jurisdiction Size (number of voters in 2008)

Reason for not voting (percent reporting it was "not a factor")	Less than 10,000	Between 10,000 and 50,000	Between 50,000 and 100,000	Between 100,000 and 500,000	More than 500,000
Line too long	81%	78%	82%	71%	61%
Registration problems	84%	78%	79%	74%	63%
Did not receive ballot/not on time	85%	82%	82%	81%	54%
Did not receive absentee ballot	87%	88%	88%	84%	69%
Wrong identification	88%	89%	92%	83%	72%

Figures in the table indicate the percent of respondents who indicated that the reason was not a factor for them not voting in the 2008 election.

Source: 2008 SPAE

Table 2
Voting Experience Measures by Size of Local Jurisdiction
2008 General Election

Jurisdiction Size (number of voters in 2008)

A during to the state of the state of	Less than	Between 10,000 and	Between 50,000 and	Between 100,000 and	More than
Administrative issue	10,000	50,000	100,000	500,000	500,000
Voted in person on Election Day	75%	70%	64%	59%	52%
Polling place was very easy to find	95%	92%	91%	90%	87%
Polling place was run very well	89%	86%	83%	80%	79%
Excellent poll worker performance	76%	71%	70%	67%	65%
Knew the poll worker who checked you in	38%	19%	11%	9%	7%
Required to show picture ID	39%	52%	64%	59%	54%
Picture ID – allowed to vote regular ballot	98%	97%	98%	97%	95%
Registration problem	1%	1%	2%	2%	3%
Registration problem - voted regular ballot	90%	87%	69%	71%	56%
Very confident vote counted as intended	77%	72%	73%	69%	68%
Waited more than 30 minutes to vote	3%	9%	15%	20%	20%
Share of electorate	15%	27%	12%	33%	13%

Figures in the table indicate the percent of respondents who gave the answer indicated in the left-hand column.

Source: 2008 SPAE

Table 3
Voting Experience Measures by Size of Local Jurisdiction
2008 General Election

Jurisdiction Size (number of voters in 2008)

Administrative issue	Less than 10,000	Between 10,000 and 50,000	Between 50,000 and 100,000	Between 100,000 and 500,000	More than 500,000
Voted in person on Election Day	73%	66%	61%	59%	56%
Required to show picture ID	46%	57%	59%	56%	55%
Picture ID – allowed to vote regular ballot	96%	96%	96%	96%	94%
Registration problem	4%	3%	4%	3%	5%
Registration problem - voted regular ballot	77%	70%	79%	68%	61%
Waited more than 30 minutes to vote	2%	8%	17%	20%	22%
Validated turnout	73%	73%	75%	78%	77%
Registration status - active	73%	72%	74%	73%	68%
Registration status – no file match	14%	15%	13%	16%	22%
Share of electorate	8%	24%	13%	35%	20%

Figures in the table indicate the percent of respondents who gave the answer indicated in the left-hand column.

Source: 2008 CCES

Table 4
Predictors of Polling Place Evaluations
2008 General Election

	Coefficient	Coefficient
Explanatory Factors	(Std. error)	(Std. error)
White voter	0.14	-0.01
	(80.0)	(0.09)
Ballots cast in jurisdiction	-0.15*	-0.05
(natural log)	(0.02)	(0.03)
Voting wait time		-0.58*
		(0.03)
Knew the poll worker		0.44*
-		(0.10)
Constant	3.16*	3.48*
	(0.29)	(0.29)
Number of Observations	9,239	8,442
Pseudo R ²	0.01	0.10

The dependent variable indicates whether the voter reported that the polling place was run "very well." Cell entries are logit coefficients, with standard errors clustered by state.

*p < .05 (two-tailed)

Source: 2008 SPAE

Table 5
Predictors of Voting Wait Times
2008 General Election

	Coefficient	Coefficient
Explanatory Factors	(Std. error)	(Std. error)
White voter	-0.32*	-0.26*
	(0.09)	(0.11)
Ballots cast in jurisdiction	0.21*	0.23*
(natural log)	(0.04)	(0.03)
State openness		-0.25*
•		(0.09)
Early voter		0.52*
J		(0.15)
Habitual voter		-0.09
		(0.07)
Less than 5 years in residence		0.12*
2000 than 5 years in residence		(0.06)
Required to show ID		0.38*
Required to show 1D		(0.11)
Registration problem		0.78*
Registration problem		(0.21)
I and annualidation (matic of		002*
Local consolidation (ratio of		003*
precincts to polling places)		(0.001)
Number of Observations	9,254	7,457
Pseudo R ²	0.02	0.04

The dependent variable indicates how long the voter waited to five, reported in five ordinal categories. Higher values indicate a longer wait. Cell entries are ordinal logit coefficients, with standard errors clustered by state.

Source: 2008 SPAE

^{*}p < .05 (two-tailed)