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A Tale of Two Counties: A Study of Vote Centers in Fresno County and St. Louis County

Lisa A. Bryant, Anita Manion, and David C. Kimball

ABSTRACT

Our study investigates the performance of vote centers in two counties that adopted them in 2020. Vote centers allow voters to cast their ballots at any polling location. These cases offer two different contexts in terms of state legal requirements and oversight. Fresno County adopted vote centers in compliance with the California Voter's Choice Act, while St. Louis County implemented vote centers without any state guidelines beyond those for traditional in-person voting. In this study, we focus on voter and poll worker awareness and evaluation of vote centers and voter perceptions of the electoral environment and their experience under the vote center model. We find largely positive evaluations and strong preferences for vote centers in both counties. Nevertheless, we observe some key differences in voting experiences reflecting the different local circumstances and legal environments in the two jurisdictions, including differences in wait times and difficulty finding voting locations. While many jurisdictions may wait until state law allows vote centers, this study shows that local election officials can adapt the system to local conditions and implement it successfully without state guidance. These are important considerations given the increasing number of jurisdictions considering vote centers.

Keywords: vote center, voting, election administration, poll worker, voter experience, survey

INTRODUCTION

We examine the performance of vote centers in two local jurisdictions, Fresno County, California, and St. Louis County, Missouri. This is a significant policy change that allows people to vote at any location (vote center) rather than being assigned to a nearby polling place. There has been a long-term movement away from Election Day voting and

toward the consolidation of polling places in the United States. As of 2022, 18 states allow local jurisdictions to adopt vote centers, a system with fewer polling locations that allows voters to cast their ballots at any location (National Conference of State Legislatures, 2023). The COVID-19 pandemic accelerated the trend toward polling place consolidation, particularly in heavily populated counties (Persily and Stewart, 2021; Manion et al., 2023). As budgetary and public health pressures push local officials to reduce the number of polling places, vote centers appear to be an appealing solution.

Our research questions focus on voter awareness and participation in response to the adoption of vote

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centers and poll worker evaluations of vote centers. The two counties in our study are similar in size (with roughly one million in total population each), and both first adopted vote centers in 2020. Thus, both counties had to contend with the pandemic while implementing vote centers.¹ When considering the approaches taken by St. Louis County and Fresno County, a substantial difference is the legal/regulatory environment in which they are operating. Fresno County is engaged in more of a top-down process of implementation, whereas St. Louis County is more of a bottom-up case. Fresno County, like several other California counties, adopted vote centers in compliance with the state's Voter's Choice Act (VCA), which includes clear requirements on voter outreach, number of voting locations, and their accessibility, among other things a topdown approach to implementation. Meanwhile, St. Louis County is the only county in Missouri to implement vote centers, and did so without any state requirements or guidelines, as Missouri law says nothing about vote centers. Thus, St. Louis County is making decisions based on its own expertise and resources, a bottom-up approach. The two counties also differ in terms of characteristics of the electorate and past voting practices; however, Fresno and St. Louis Counties also share some similarities. Again, they are roughly the same size in terms of population, and they are both suburban, car-based communities with limited public transportation. We compare these two counties to test whether the differences in state oversight and local conditions affect vote center performance. In particular, do the state requirements in California yield a smoother transition to a new system or do vote centers provide a similar voter experience despite environmental context and state policy?

We conducted surveys to measure voter and poll worker experiences with the newly adopted vote centers. We find largely positive evaluations and strong preferences for vote centers among both constituencies in both counties. Nevertheless, we observe some differences in voting experiences reflecting the different local circumstances and legal environments in the two jurisdictions. There is no one-size-fits-all approach to implementing vote centers, but local election officials need to determine how best to adapt the system to local conditions.

BACKGROUND ON VOTE CENTERS

Vote centers represent a significant change in the voting process, and it is important to assess the voting experience after changes are implemented. Research tends to yield mixed results on the impact of vote centers. One large-scale study finds shorter voting lines and more positive evaluations of the polling place experience in states with more open opportunities for voters to cast their ballots, including vote centers (Stein and Vonnahme, 2014). Some find high levels of voter satisfaction with vote centers (e.g., Folz, 2014; Scheele et al., 2009). In Harris County, Texas, however, vote center voters reported a less positive experience, including longer lines and less helpful poll workers (Chen et al., 2021). Initial implementation of vote centers in Denver, Colorado also featured long lines and other administrative challenges (Montjoy 2008), although they were among the first in the country to make the change. Recent research in California finds that voters of color are less likely to be aware of new voting options associated with vote centers (Romero and Chami, 2022). Thus, some of the research points to disparities in voter knowledge and experience with vote centers, which indicates that targeted outreach to underrepresented communities is important. Overall, the mixed results indicate that local implementation of vote centers is critical in producing positive results.

Given the relatively low turnout levels in the United States, there is much interest in the impact of any election reform on voter participation and election performance. Previous research yields somewhat positive results on the impact of vote centers on voter turnout. Some research finds that the added convenience of voter centers increases turnout. Two studies by Stein and Vonnahme (2008; 2012) focusing on jurisdictions in Colorado and Texas find that vote centers increase turnout, particularly among infrequent voters. Research in California associates vote centers with a modest increase in voter turnout (Bryant, 2019; McGhee et al., 2019). Cortina and Rottinghaus (2019) also find a modest turnout increase in vote centers, but only in low turnout, off-

¹State responses to the pandemic varied widely, but both states in this study kept voting locations open during the pandemic and allowed no-excuse vote-by-mail, although an application was required in Missouri.

cycle elections. Other studies, examining Indiana counties and a southern municipal election, find that vote centers have no effect on voter turnout (Folz, 2014; Scheele et al., 2009). However, studies in California also find that the implementation of vote centers often results in an increased travel distance for voters to cast a ballot (Romero et al., 2019), especially for rural and Latino voters (Cortina and Rottinghaus, 2021), which could decrease turnout. A recent study by Barber and Holbein (2022) identifies many “turnout deserts” (local communities with low turnout) in the United States, particularly in minority neighborhoods, but it is unclear what happens in turnout deserts after the transition to vote centers. Overall, the impact of vote centers on turnout seems to be modest at best.

Local election administration has been described as an “electoral ecosystem” (Huefner et al., 2007) with an array of interdependent functions and actors; if you change one part of the system it will have ripple effects in other parts of the system (Hale et al., 2015; Montjoy, 2019). Administering an election involves a complex interaction of people, processes, and technology, and these systems can be prone to errors or “normal accidents” (Moynihan, 2004; Perrow, 1999). Implementing any election reform involves coordination among staff, technology, processes, and training procedures to ensure a smooth transition. In the case of vote centers, sometimes the implementation is successful and sometimes it is very problematic (Montjoy, 2008; Doyle, 2008). There were different approaches to the implementation of vote centers in Fresno County and St. Louis County, largely due to legal requirements in California and the lack of regulations or precedence in Missouri that may impact the voter experience or overall election performance in the jurisdictions.

THE MOVE TO VOTE CENTERS IN FRESNO COUNTY AND ST. LOUIS COUNTY

Fresno County and St. Louis County have some similarities, as mentioned; however, there are crucial differences between these cases as well, including the regulatory environment under which they adopted vote centers, the number of poll workers and polling places utilized, and the use of vote-by-mail in each

jurisdiction.² Table 1 provides a comparison of the two jurisdictions in 2018 (before the adoption of vote centers) and 2022 (after implementation). The table shows a significant drop in Election Day polling locations after the adoption of vote centers. Although the overall populations are similar in size, St. Louis County had over four times as many polling places on Election Day in 2022 (after the implementation of vote centers) and more than six times the number of poll workers compared to Fresno County. A notable reason for this disparity is the use of absentee/vote-by-mail (VBM), which is much higher in Fresno County, leading to fewer Election Day voters. Even before the VCA, California allowed no-excuse absentee voting and permanent absentee voting, while Missouri requires voters to provide an excuse for voting absentee by mail, and in many circumstances, the VBM ballot must be notarized.

Finally, these two cases differ in terms of the political orientation of the electorate. St. Louis County has become a Democratic stronghold in Missouri politics, with candidates at the top of the ballot receiving 61% of the vote in the most recent general elections (see Table 2). Fresno County is very competitive politically. Biden won the popular vote in Fresno in 2020, but GOP statewide candidates carried the county in the 2022 midterms.

Fresno county approach

The VCA was passed by the California State Legislature and approved by Governor Jerry Brown in 2016 (California SB450, 2023). This bill made extensive changes to California’s voting system and allowed counties to opt-in to the new system, rather than mandate changes statewide. VCA was first

²While the counties have roughly the same population size, Fresno County covers a much larger land mass (almost 6,000 square miles) than St. Louis County (508 square miles). However, two-thirds of the population of Fresno County reside in an urban/suburban setting in the neighboring cities of Fresno and Clovis, with a population density of 4,700 per square mile. St. Louis County is a suburban jurisdiction directly west of the city of St. Louis, with a population density of 2,000 per square mile. Furthermore, Fresno is a majority Hispanic county, whereas St. Louis is a majority non-Hispanic White county. Finally, the number of registered voters is significantly higher in St. Louis County, with roughly 645,000 registered voters, compared with approximately 455,600 in Fresno County. This is likely due to the number of eligible voters in the population. Fresno has a large immigrant population, including a large number of undocumented residents (U.S. Census Bureau, 2021b; 2021a).

TABLE 1. TRANSITION IN ELECTION ADMINISTRATION FROM 2018 TO 2022

<i>Election year</i>	<i>Fresno County, CA</i>		<i>St. Louis County, MO</i>	
	<i>2018</i>	<i>2022</i>	<i>2018</i>	<i>2022</i>
ED polling places	268	52	411	239
Poll workers	1,600	400	3,439	2,753
Turnout	256,972	221,419	460,349	372,162
	36.8% of VAP	28.4% of VAP	59.2% of VAP	49% of VAP
	56.4% of RV	44.3% of RV	69.2% of RV	57.7% of RV
Absentee/VBM	61%	87%	12%	21%
In-person	39%	13%	88%	79%

RV, registered voters; VAP, voting-age population; VBM, vote by mail.

implemented by five counties (Madera, Napa, Nevada, Sacramento, and San Mateo) in the primary and general elections in 2018 and adopted by ten additional counties (Amador, Butte, Calaveras, El Dorado, Fresno, Los Angeles, Mariposa, Orange, Santa Clara, and Tuolumne) for implementation in 2020 (Weber and Jordan, 2022). Fresno County began planning in 2019 and first implemented vote centers for the Presidential Primary Election in March 2020, just two weeks before the COVID-19 pandemic forced the state to go into its first lockdown.

Before the passage of the VCA, California already had no-excuse absentee voting and permanent vote-by-mail options. The VCA expanded the number of ways absentee voters could return ballots by requiring counties to provide ballot drop boxes and transitioning counties from a precinct/polling place voting model to a vote center model. It also included requirements for early in-person voting, with some locations open 10 days before Election Day, for a total of 11 days, and the remaining locations open three days before and including Election Day, or a total of four days, including Sunday (Bryant, 2019). Before VCA, California technically offered early in-person voting; however, in almost all counties, the only location where early voting could be done was at the Election Clerk's office, resulting in very low numbers of early voters. Finally, the VCA included conditional same-day voter registration, allowing voters to register or

update their registration and vote on the same day using a provisional ballot. In combination, these changes should increase voter turnout through early voting and increase the number of valid ballots cast by replacing traditional provisional ballots with conditional voter registration. The number of reforms implemented at once effectively created a complete overhaul of the election administration in these counties (Bryant and Adona, 2022).

The most significant change created by the VCA was the institution of all-mail elections in VCA counties. Under the VCA, each registered voter is mailed a ballot, regardless of whether or not they were previously permanent vote-by-mail voters. As previously mentioned, the law increased choices for voters to return in their ballots. Voters can return their ballot by mail as long as the ballot is post-marked by Election Day. Alternatively, voters can return their mail ballots to any vote center, many of which are open at least three days before Election Day, or they can return their ballots to drop boxes, most of which are available 24 hours a day for at least 28 days before the election. The use of ballot drop boxes, which gives voters direct access to the county and eliminates the intermediary effect of the U.S. Post Office, has also been shown to slightly increase voter turnout (McGuire et al., 2020). Overall, these reforms make absentee voting much easier for Californians, which in turn should increase voter turnout.

In addition to the requirements about the number of locations and drop boxes, the VCA requires election officials to present an Election Administration Plan to the Secretary of State before the implementation. This plan includes information about how the community will be involved in choosing locations and how the election official will conduct voter

TABLE 2. DEMOCRATIC VOTE SHARE IN LEADING CONTESTS DURING RECENT GENERAL ELECTIONS

<i>Election year</i>	<i>Fresno County, CA</i>	<i>St. Louis County, MO</i>
2020	President (53%)	President (61%)
2022	Governor (45%)	US Senate (61%)

outreach and public education campaigns, both of which are required under the VCA.³ In 2018, the County Clerk sent three direct mailers to each registered voter in the county letting them know about the change to the vote center model and informing voters they would be receiving a mail ballot. This was replicated in 2020 and 2022. Voters in Fresno County also receive a printed voter guide with information about all races and ballot measures in the county.⁴ The voter guide also includes information about vote centers, lists of vote center and drop box locations, and information and instructions about how to complete and return VBM ballots. In addition to these direct mailers, the Clerk runs social media ads and public service announcements on radio and television.⁵ They also do outreach to social and civic organizations in the county and ask them to share information with their members. These efforts should result in a high level of voter awareness that they can vote at any location in the county because all communications include information about both vote centers and VBM.

The first election under the vote center model, the 2020 Presidential Primary Election, was not without hiccups. At approximately 9:30 am, the ballot on demand server went down and voters were unable to vote for nearly an hour and a half, creating long lines of voters at some locations. Provisional ballots were also issued using the ballot-on-demand system, so voters could not even vote provisionally and leave (Clough, 2020). The system had a series of outages throughout the day, including one during the 5 o'clock hour as voters started to arrive in large numbers which again resulted in some long lines; however, none of the subsequent outages lasted as long as the morning outage. The 2020 General Election ran smoothly, but because California was still under strict COVID guidelines, the Governor encouraged people across the state to use VBM rather than vote centers (Myers, 2020). The increased use of VBM may result in shorter wait times for those in Fresno County than in St. Louis County.

St. Louis county approach

As noted above, Missouri law says nothing about vote centers but does not prohibit them (Manion et al. 2023). In addition, other states that have adopted vote centers have simultaneously introduced other convenience measures, particularly

early in-person voting or voting by mail (or both). Missouri generally does not have those other convenience options, although the state adopted a two-week early in-person voting period for the November 2022 election. In any case, St. Louis County is the only jurisdiction in Missouri to implement vote centers, and the county did so largely on its own, without guidance from the state.

The COVID-19 pandemic was the most immediate cause for St. Louis County to adopt vote centers in 2020. The pandemic first arrived as the county and state were administering a presidential primary election in March 2020. Approximately 170 St. Louis County poll workers quit the day before or the morning of the primary election (St. Louis County BOE Minutes March 24, 2020). In addition, the day before the election one polling place venue decided not to open for Election Day (Bilchik, 2020: 173). In response to the pandemic, Missouri Governor Mike Parson postponed the April 2020 municipal elections until June 2020. These were early signs that the pandemic would significantly disrupt election administration.

Matters came to a head in the summer of 2020 when most private locations in St. Louis County (such as churches, nursing homes, and private schools) backed out of polling place commitments (St. Louis County Board of Election Commissioners, 2020). Under state law, only public venues can be compelled to serve as polling places (Manion et al. 2023). Anticipating a severe reduction in the number of available polling places and poll workers, the St. Louis County Board of Elections (BOE) decided to adopt a vote center model allowing county voters to cast their ballots at any polling place on Election Day.

In addition to coping with the pandemic, St. Louis County had some long-term reasons to consider a new process to allow voters to cast their ballots at any polling place. Vote anywhere addressed

³The original and revised versions of the 2020 Fresno County Election Admini Plan are available at: <https://www.co.fresno.ca.us/departments/county-clerk-registrar-of-voters/voters-choice-act/election-administration-plan/election-administration-plan-archive>

⁴All federal and st races are in the printed voter guide that comes from the Secretary of St.

⁵The Fresno County election admini plan, voter education, and outreach toolkit, including social media po, can be found online at: <https://www.fresnocountyca.gov/Departments/County-Clerk-Registrar-of-Voters/Elections/Voting-Options/Voters-Choice-Act#section-2>

missteps in previous elections: a few polling places provided incorrect ballots to voters in the 2014 primary election, and some polling places ran out of ballots in the 2016 municipal elections (Bilchik, 2020). Local officials were determined to never repeat those mistakes. In 2019, the BOE selected a new vendor to replace the county's aging voting equipment and software. Hart InterCivic was selected as the vendor based, in part, on its ballot-on-demand system, which can print any ballot style once it is given a voter's precinct. In addition, the county had recently purchased electronic poll books, which allowed the BOE to track voter check-ins at all polling places in real-time. These two pieces of critical equipment allowed the county to implement a vote center system.

In the transition to vote centers, the St. Louis County BOE had to make decisions about which polling locations to utilize. Their initial approach was to retain polling places at public locations and to eliminate those at most privately owned locations, since most private venues withdrew from their polling place commitments in June 2020 due to the pandemic. As a next step, the BOE considered the characteristics of the polling places. Venues that were selected as vote center locations had to have ample parking, a room that was large enough, doorways that would accommodate the larger cages needed for the voting equipment, and be accessible for voters with disabilities. Once locations that met those criteria were identified, BOE staff mapped out the acceptable polling locations, assessed drive times to those locations, and considered population density and access to major roadways and public transportation to determine which locations would be used (Al Molitor, interview June 16, 2022).

The BOE also needed to inform residents of St. Louis County about changes to their voting options and locations. In Missouri, there was no mandated communication strategy like the one Fresno County used under the VCA. The directors of the St. Louis County BOE, in collaboration with their staff, implemented their own communications strategy. Just before the 2016 general election, the BOE created and filled the position of Public Information Coordinator to manage press conferences, media coverage, social media, and other communications. Before that, the BOE had no social media presence. They also used the notice of election cards that were mailed to every registered voter to communicate

information about changes in the voting process. These cards included the name and address of polling locations closest to the voter's home address. In addition, BOE staff developed and promoted a line tracking application that allowed voters to determine the wait time at all polling locations in the county.

Anticipating a surge in absentee voting due to the pandemic and changes in state law, the St. Louis County BOE included absentee voting information in mailers sent to all registered voters in 2020. BOE staff also launched two digital advertising campaigns, targeted to voters over age 55 that explained absentee voting procedures to voters who were largely unfamiliar with that voting method. Both ads were viewed by over 60% of county residents in the targeted age group (St. Louis County Board of Elections, 2021). These efforts were meant to help inform voters of their options and to reduce the volume of in-person, Election Day voters. Overall, although there were no state regulations in Missouri, St. Louis County's voter education efforts are similar in scope and frequency to those adopted in Fresno County.

HYPOTHESES

When considering the approaches taken by St. Louis County and Fresno County, the most substantial difference is the legal/regulatory environment in which they operate. Because of the provisions in the VCA, local election officials (LEOs) in Fresno County were operating in a top-down approach with very specific state requirements they had to abide by when it comes to the number of polling locations, as well as voter outreach and education efforts. Because of these requirements, (H1) *we expect that voters in Fresno County will be more aware of the vote center model in their jurisdiction than the voters in St. Louis County*. Conversely, in Missouri, there are no requirements for the vote center or "vote anywhere" approach. LEOs in St. Louis County developed their own approach to vote centers, a bottom-up approach. St. Louis County largely maintained the existing precinct locations that were housed in public facilities and eliminated those locations that were housed in private facilities. Fresno County, on the other hand, moved out of neighborhoods and into larger spaces on main streets and bus

routes, as required by law, although like St. Louis, primarily utilized public facilities as vote centers. Since many voters in St. Louis County could continue to vote at the polling place where they had previously voted and because St. Louis County has significantly more polling places than Fresno County, (H2) *we hypothesize that St. Louis County voters will feel more familiar with polling locations, reporting that locations were easier to find than in Fresno County.* However, Fresno County's extensive use of vote-by-mail means fewer in-person Election Day voters. So, (H3) *we anticipate that wait times could be longer for voters in St. Louis County.*

The vote center model in both counties allows voters to vote at any polling location in the county, which provides convenience to all voters, including poll workers, who can now vote at the location where they work, even if it is not in their neighborhood. Under the vote center model, voters will not be turned away for being at the wrong polling place. Turning away voters and sending them to another location creates a source of friction for poll workers and voters that the vote center model reduces or eliminates.⁶ The vote center model means poll workers do not have to determine the correct ballot style and there are fewer provisional ballots issued and potentially shorter wait times.⁷ The use of electronic poll books reduces the workload of poll workers, who no longer have to count signatures at the end of the day. Taken together, these seem like improvements over the precinct model, *thus (H4) we expect that voters and poll workers will support the vote-center approach over requiring voters to cast their ballots at an assigned polling place.* We also hypothesize that because there is a reduction in locations and fewer people working with ballots, (H5) *voters in both counties will perceive vote centers as more secure.*

VOTER AWARENESS AND PREFERENCES: VOTER SURVEY

In order to test our hypotheses on voters, we conducted surveys of registered voters in both Fresno and St. Louis counties. All surveys were completed online following the 2022 general election. The survey asked voters whether or not they

voted, their vote mode (in-person or vote-by-mail/absentee), difficulty finding the voting location or drop box, how long they waited to vote, whether or not they preferred the vote center or the polling place model, how confident they were their vote and all votes in the county were counted correctly if they believed vote centers made elections more secure, and how common election fraud was in their county.⁸ We also collected information on years of residence, party identification, education, race/ethnicity, age, income, and other variables that may play a role in the voter's experience and preferences.

Because we are focusing on counties and not statewide samples, recruitment was somewhat difficult. In an effort to maximize the number of respondents, we used a two-pronged approach to recruitment. First, we contracted with Dynata to invite registered voter panel survey respondents in each of the respective counties to take our survey. The survey was programmed by the authors in Qualtrics, and the link was provided to Dynata to share with their panel participants.⁹ The Dynata survey went into the field on November 11, 2022, and responses were collected through November 29, 2022. Dynata made multiple contacts with panel participants to maximize the number of responses in each county. This provided us with a total of 759 completed surveys, 513 from St. Louis County and 246 from Fresno County.

Second, we purchased the registered voter lists for each county with e-mail addresses from Catalist,

⁶Not turning away voters may be especially important for poll workers. In St. Louis County, under the old sy, there was at least one poll worker at each location devoted solely to handling voters who went to the wrong polling place. Helping such voters, getting their correct address, finding them in the sy, figuring out the correct polling place, and communicating all of this with the voters can take a lot of time (and often involved at least one phone call to the election office). Those interactions were frustrating for voters and for poll workers.

⁷In St. Louis County, voters can use an app to check wait times and potentially avoid places that are congested. That may also make for a somewhat more pleasant, or less stressful, experience for poll workers.

⁸We also asked nonvoters why they did not vote and the modal response was that they did not feel they knew enough about the election (21%), but we do not analyze nonvoters in this article.

⁹Dynata, formerly known as Survey Sampling International (SSI), uses an online panel of respondents who take surveys in exchange for rewards. Learn more about their panels in their Panel Book available at: <https://www.dynata.com/content/Panel-Book.pdf>

LLC.¹⁰ We limited our sample to medium and high-propensity voters and one registered voter per household. We e-mailed invitations to 75,000 registered voters in each county. Invitations were mailed out to Missouri residents on November 21, 2022, with reminders sent on November 28 and December 5. There were 350 responses through direct invites. The Fresno County voter file required Secretary of State approval before it could be released to the researchers, delaying direct invites. The first invites were sent on December 27, 2022, with a reminder sent on January 3, 2023. There were 311 completed surveys through direct invite. We have a total of 863 completed surveys from St. Louis County and 555 surveys from Fresno County, equaling 1,418 surveys in total.¹¹

One of the key questions of our study focused on whether or not voters are aware that the change to the vote center model allows them to vote anywhere in their county. St. Louis County still “assigns” voters to a location but voters have the ability to go to any voting location and cast a ballot, whereas voters in Fresno County have no assigned locations and it is widely promoted that all voters can go to any vote center. We hypothesize that this could produce different levels of knowledge, with Fresno voters being more aware of the flexibility to vote anywhere. To gauge this, we asked, “Where are you allowed to vote in (county name)?” Just over 54% of respondents in the survey knew that they could vote at any location, but there were surprising differences by county. Nearly 62% of voters in St. Louis County reported that they could vote at any location compared with only 42% of voters in Fresno County. If we exclude those who said “don’t know” and keep only those who chose an assigned precinct or any location, the difference is smaller, but still statistically significant with a 13 percentage point gap (58% in Fresno County compared with 71% in St. Louis County who knew they could vote at any location). Table 3 shows the results of the mean tests for differences. These results do not support our hypothesis (H1), and the high number of Fresno respondents who are not familiar with the vote center model are surprising given the amount of outreach and direct contact Fresno conducted to comply with the VCA. Furthermore, our results about low knowledge are consistent with other research on VCA counties in California. A survey conducted by the Center for Inclusive Democracy

(2022) found that only one-third of respondents in VCA counties knew their county had changed options on where, when, and how to cast a ballot.

In 2018, prior to converting to vote centers, Fresno County had 268 voting locations and St. Louis had 411. In 2022, Fresno County had only 52 vote centers, whereas St. Louis had 239 vote centers. Fresno closed almost all small neighborhood locations, while St. Louis kept many of their familiar, neighborhood-based locations. We hypothesize that this would leave registered voters in St. Louis County feeling more familiar with their polling locations than registered voters in Fresno County. We asked respondents, “How difficult was it to find your polling place to vote?” The results are positive, with 87% of all respondents reporting that it was “very easy” to find their location and another 10% reporting that it was “somewhat easy”. When broken down by county, there are stark differences. Approximately 90% of voters in St. Louis County reported that locations were “very easy” to locate, compared with 73% in Fresno County.¹² This 17 percentage point difference is statistically significant ($t = 4.2$, $p < 0.001$) and supports our hypothesis (H2) that St. Louis County voters will report that locations were easier to find than in Fresno County. This suggests that if local election officials are making the switch to vote centers, it might benefit voters to keep many of the same locations if possible.

While voters in St. Louis were able to find their locations more easily due to familiar locations, those polling places are likely smaller than the vote centers in Fresno County; so, they may have longer wait times. In addition, more voters in Fresno County vote by mail than in St. Louis County, which means less foot traffic in the voting locations. Considered together, we hypothesized that wait times could be longer for voters in St. Louis County. To test this, we asked, “Approximately how long did

¹⁰Catali subcontracts V12 to match e-mail addresses from consumer data to the regi voter file.

¹¹There were some noticeable differences among the respondents across the two counties and between the two methods of survey recruitment. Supplementary Appendix Table S1 in Supplementary Appendix A shows these differences broken down by county and method of recruitment.

¹²Because only 15% of respondents in Fresno County voted in person, we asked if it was difficult to find information about drop box locations and less than 6% reported that it was “somewhat” or “very” difficult, whereas nearly 82% said it was “very” or “somewhat” easy.

TABLE 3. SUMMARY OF MEAN VOTER RESPONSES BY COUNTY FOR HYPOTHESIS TESTS

<i>Question and response options:</i>	<i>Fresno County</i>	<i>St. Louis County</i>	<i>t-test results</i>
H1: Where are you allowed to vote in (county name)? (1 = Assigned location, 2 = Any location)	1.59 (0.04)	1.67 (0.02)	2.76**
H2: How difficult was it to find your polling place to vote? (1 = Very easy, 4 = Very difficult)	1.31 (0.05)	1.13 (0.02)	4.19***
H3: Approximately how long did you wait in line to vote? (1 = No wait, 2 ≤ 10 min, 3 = 10–30 min, 4 = 31–60 min, 5 ≥ 1 hour)	1.92 (0.10)	2.17 (0.04)	2.62**
H4: Do you prefer letting voters go to any polling location or do you prefer assigning each voter to a local polling place? (1 = Any location, 2 = Assigned location)	1.30 (0.02)	1.20 (0.01)	4.13***
H5: Do you think vote centers make elections more secure (due to fewer locations)? (1 = Yes, 2 = No)	1.43 (0.02)	1.43 (0.02)	0.21

Notes: Don't know was excluded from analyses. * $p < 0.05$. ** $p < 0.01$. *** $p < 0.001$.

you wait in line to vote?" Responses were no wait, less than 10 minutes, between 10 and 30 minutes, 31 minutes to an hour, or more than one hour. Almost 70% of all voters in the survey reported that they had very little to no wait. In Fresno County 47% of in-person voters reported no wait, while only 27% in St. Louis County reported the same. Another 26% in Fresno and 39% in St. Louis reported they waited less than 10 minutes. One in four voters in St. Louis (24%) reported waiting between 10 and 30 minutes, while only 18% of voters in Fresno waited that long. Finally, just under 2.5% of in-person voters in Fresno and 1.5% of voters in St. Louis reported waiting more than one hour. Overall, voters in Fresno had shorter wait times than those in St. Louis and this difference was statistically significant ($t = 2.6$, $p < 0.05$), supporting our hypothesis (H3).

We asked respondents whether they preferred letting voters go to any polling location or whether they preferred an assigned location. Three out of four respondents (72%) preferred the vote center model as we expected (H4). Preference for vote centers was higher in St. Louis County (80%) than in Fresno (71%) ($t = 4.13$, $p < 0.001$) excluding don't know responses.¹³ This could be because many voters in St. Louis were still able to vote at a familiar location and reported easier time finding locations. Furthermore, more voters in St. Louis County than in Fresno County seem to be aware of the vote anywhere system.

One of the administrative benefits of transitioning to vote centers is that there are fewer locations to manage and fewer individuals handling ballots. We asked respondents if they thought that this made vote centers more secure and 57% of voters in both counties said yes. While there is support for our

hypothesis (H5), there was no statistical difference between voters in the two counties on this question. This was the only question where respondents in both counties gave near identical responses.

Finally, we asked respondents, "How would you rate your voting experience overall?" Nearly 7 out of 10 respondents reported that they had an "excellent" experience (67%), while another 28% reported that their experience was "good". Only 5% of respondents reported a "fair" or "poor" experience. Consistent with our other findings, there were again differences between counties, although they were much smaller than the differences for many questions. In Fresno, approximately 93% of voters reported an "excellent" or "good" experience, and an impressive 96% reported good or excellent experiences in St. Louis.

The results show us that there are some marked differences in perception of how well elections are run and how much confidence registered voters have in the administration of elections in their respective counties. Given the very structured rollout of changes in Fresno County, some of these results are surprising.

The results, presented in Table 4, confirm that Fresno County and St. Louis County voters had somewhat different election experiences. Consistent with the previous section, the models confirm that Fresno voters were more likely to have difficulty finding a location (model 1) and had lower wait times (model 2).

Length of residency is also significant in both models. The results indicate that those who have lived at their residences longer have less difficulty finding a location and report shorter wait times.

¹³Approximately 8% of Fresno respondents and 4% of St. Louis respondents did not know what they preferred.

TABLE 4. REGRESSION RESULTS FOR VOTER SURVEY MODELS: FRESNO AND ST. LOUIS COUNTIES

Model	<i>Difficult to find polling location</i>	<i>Wait time</i>
	(1)	(2)
Fresno County	0.892** (0.285)	-0.730*** (0.219)
Years at Residence	-0.375* (0.173)	-0.300* (0.119)
Republican	-0.00855 (0.259)	-0.261 (0.157)
Other party	0.109 (0.298)	0.0464 (0.182)
Latino	0.494 (0.420)	0.303 (0.343)
Black	0.223 (0.306)	-0.235 (0.197)
Women	0.0215 (0.225)	-0.0370 (0.137)
<i>n</i>	779	777

Notes: All models are ordered logit. Standard errors in parentheses. * $p < 0.05$. ** $p < 0.01$. *** $p < 0.001$.

Because Fresno County had a large reduction in the number of locations and because St. Louis kept a greater number of locations and established vote centers at previously used locations, we expect that there may be variation in wait times and the ease of finding locations by county. Supplementary Appendix B includes county-specific models to further examine this. Supplementary Appendix Table S2, which is restricted to Fresno County voters, shows that length of residence was not significant in any of the models. Supplementary Appendix Table S3 shows that in St. Louis County, where more of the same locations were used, length of residence was significant in all models.

Partisanship does not appear to have an effect on difficulty finding a voting location or in how long voters report waiting to vote, nor does gender or race and ethnicity.

To evaluate the impact of the substantive differences in difficulty finding locations, we examined the predicted probabilities of voters in the two counties reporting difficulty in finding a voting location. Figure 1 shows that the majority of all voters report that locations are very easy to find, but voters in St. Louis are more likely to respond “very easy” than voters in Fresno. The figure also shows that voters in both counties are about equally unlikely to report that locations are difficult to find.

Figure 2 shows the predicted probabilities for wait time by county. The results show that in-person voters in Fresno County were significantly more likely to report that there was no wait time. This could be due to the fact that there were far fewer in-person voters and that early voting took place over ten days prior to the election, reducing traffic on Election Day. Voters in St. Louis County were significantly more likely to report waiting between 10 and 30 minutes and between 31 and 60 minutes than voters in Fresno County. In neither county were voters very likely to report waits over an hour, although St. Louis was slightly more likely.

EVALUATIONS FROM POLL WORKER SURVEY

Poll workers are crucial to election administration, and they influence the voter experience. On

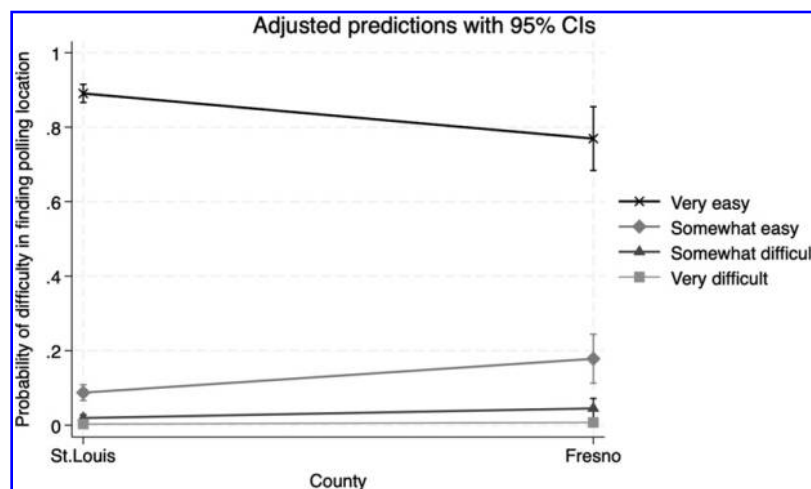


FIG. 1. Predicted Probabilities for Difficulty in Finding Voting Locations in Fresno and St. Louis Counties. CI, confidence interval.

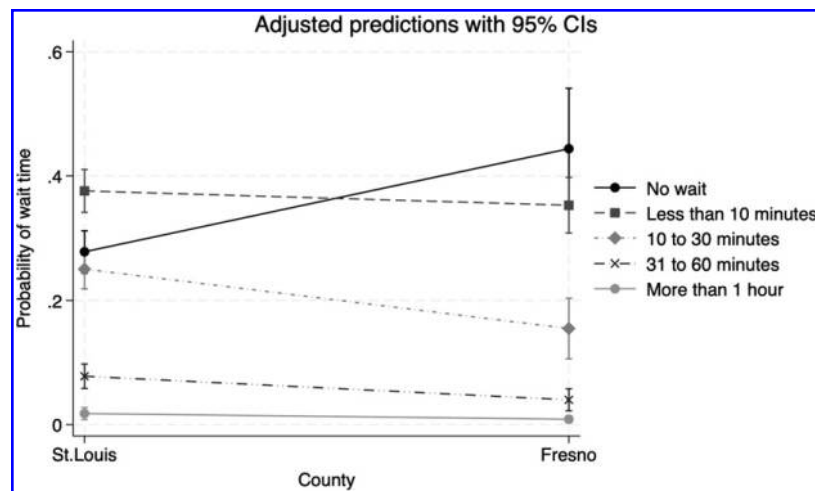


FIG. 2. Predicted Probabilities for Wait Times in Fresno and St. Louis Counties. CI, confidence interval.

Election Day, the implementation of vote centers largely rests with poll workers. Voters' perceptions of poll workers have been shown to be a predictor of voter confidence, and so getting poll workers' buy-in to an election reform and making sure that they are well trained on how to implement the reform is critical to its success (Hall et al., 2009). Thus, we also measure poll worker evaluations of vote center performance in both counties. To test our hypotheses about wait times and poll workers' support of the vote center model, a survey was sent through e-mail to poll workers in St. Louis County and Fresno County in September 2022. The surveys asked about their experience and perceptions as poll workers and were part of a larger project led by Robert Stein and Barry Burden that surveyed more than 5,500 poll workers in 19 jurisdictions in 10 states and which was funded by the MIT Election Data and Science Lab (Burden and Stein 2022). The survey that was sent to poll workers in St. Louis and Fresno Counties used the standardized questions developed by Burden and Stein, as well as one additional question that asked poll workers whether they prefer letting voters go to any polling location or prefer assigning each voter to a local polling place. The survey was sent to 2,364 poll workers in St. Louis County and garnered 973 responses for a response rate of 41.2%. The survey was sent to 319 poll workers in Fresno County and garnered 97 responses for a response rate of 30.4%.¹⁴

There are many aspects to election administration from a poll worker's perspective that voters would not be aware of but would still impact the quality of the voter experience and overall election performance. A

key aspect of making the transition to vote centers a success is adequately training poll workers on the new processes. In Fresno and St. Louis Counties, most poll workers were experienced. The modal time for a respondent to have worked as a poll worker is 2–5 years (47.5%), and 73% have worked more than two elections. Poll workers in both jurisdictions have positive assessments of their training, with minimal difference between the two counties. Overall, 98.1% of poll workers agree or strongly agree that the training instructors were knowledgeable and answered questions thoroughly. When asked whether as a result of their training, they were adequately prepared to serve as an election worker in any election, 96.2% of respondents agreed or strongly agreed that they were prepared. In addition, 97.7% agreed or strongly agreed that they were provided with clear instructions of what was expected of them as a poll worker. There was a slight decline to 88.1% in those who agreed or strongly agreed that the training provided was in-depth enough to solve any problems they experienced as a poll worker. Altogether, the poll workers' perspectives are aligned with the perspectives of LEOs in both jurisdictions—that training of poll workers for the transition to the vote center model went well.

In order to test whether poll workers find the voter center model to be burdensome, we analyzed respondents' opinions about being a poll worker.

¹⁴Demographic information about the poll workers in both jurisdictions can be found in Supplementary Appendix C and Supplementary Appendix Table S4.

There was a divergence between the two jurisdictions in poll workers' perspective that their state has enacted laws that make it more difficult for them to perform their duties as a poll worker. In St. Louis County, 23.4% of respondents agreed or strongly agreed, whereas in Fresno County only 3.7% agreed or strongly agreed. This difference could be due to changes in voter ID laws that were recently enacted in Missouri. When asked if working as a poll worker has become more difficult, the responses were more similar, with 22.1% of St. Louis poll workers agreeing or strongly agreeing and 26.8% of Fresno poll workers saying the same. Still, the overwhelming majority of respondents in both jurisdictions disagree or strongly disagree that working as a poll worker has become more difficult, suggesting that poll workers do not feel a heavy burden in transitioning to vote centers, as is shown in Table 5.

Respondents were also asked to reflect on their experience in the 2020 presidential election, in which 97.9% of the respondents were poll workers. They were asked whether voters at their polling place experienced a number of issues. There were similar results in both counties with almost all respondents saying that few or no voters experienced problems: recording their votes on the voting equipment (97.7%), checking in to vote with the proper identification (97.5%), and completing a provisional ballot (98.1%).¹⁵

However, there was a difference between the counties when asked how many voters waited for more than an hour to vote. In Fresno, 97.3% of poll workers said that few or no voters waited for more than an hour, but in St. Louis only 75.9% of poll workers had the same perspective ($t = -12.234$; $p < 0.001$). This is consistent with our hypothesis (H3) that wait times would be longer in St. Louis County compared with Fresno County. The longer wait times in St. Louis County may be due to the fact that a much higher share of voters cast their ballot in person on Election Day in St. Louis County than in Fresno County.

To test our hypothesis that poll workers will support the vote center approach over requiring voters to cast their ballots at an assigned polling place (H4), we asked poll workers in St. Louis and Fresno Counties which model they prefer, and 93.5% said they prefer letting voters go to any polling location (the vote center approach that is used in both counties). Poll worker support for the vote center

approach was nearly identical in both counties, with 93.2% of Fresno County poll workers and 93.5% of St. Louis County poll workers preferring to let voters go to any polling place ($t = -0.927$; $p = 0.354$). These findings are also consistent with our hypothesis.

The results show us that overall, there are marked similarities in poll workers' perception of whether voters should be allowed to vote at any location and the wait times in their respective counties. Table 6 shows a summary of the results discussed above. We find consistent positive evaluations of vote centers from poll workers across both counties. The biggest observed difference was in voter experience, specifically in the number of voters who waited for more than an hour to vote. Overall, the evidence from the surveys of poll workers supports our hypotheses.

CONCLUSION

Both St. Louis and Fresno Counties adopted vote centers in 2020, an unusual year for elections due to the COVID-19 pandemic. In 2022, both counties utilized a vote center approach during a more typical election year. However, the local electorate, legal environment, and implementation patterns were very different for these two counties. Fresno County, along with several other California counties, adopted vote centers along with a set of other reforms in a top-down manner, in compliance with the state's VCA. In contrast, St. Louis County is the only Missouri jurisdiction to implement vote centers and did so without state guidance. Our findings indicate largely positive experiences with vote centers for both voters and poll workers in Fresno County and St. Louis County. However, we observe some differences in voter experiences between the jurisdictions that reflect local conditions, especially wait times and ease of finding voting locations.

Voters and poll workers in both counties strongly preferred the vote center model and agreed on how long people had to wait (Fresno County had shorter wait times than St. Louis County, mainly because there were substantially fewer in-person voters in

¹⁵Burden and St also conducted a po-2022 election poll worker survey where they were asked to reflect on the 2022 election. We participated in that survey as well, and the results were very similar to the responses presented here for 2020.

TABLE 5. RESPONSES FROM POLL WORKER SURVEY

<i>Question and response options:</i>	<i>Fresno</i>	<i>St. Louis</i>
Worked as a poll worker in 2020?	87%	99%
Prefer vote centers	93%	94%
Few/no voters had problems recording votes	97%	98%
Few/no voters had problems checking in	97%	98%
Few/no voters had problems completing provisional ballot	99%	92%
Few/no voters waited more than 1 hour	97%	76%
Disagree/strongly disagree that working as a poll worker has become more difficult	64%	68%
Response Rate (<i>n</i>)	30.4% (97)	41.2% (973)

Fresno County). Large majorities in both jurisdictions also perceive that elections are more secure under the vote-center model. Thus, vote centers were implemented successfully in two large but very different counties. Both counties in this study engaged in extensive efforts to communicate with constituents about the new voting procedures; however, voters in St. Louis County were more likely to report that they could vote anywhere. Ultimately, the different state regulatory environments did not appear to either enhance or undermine the performance of vote centers in either of these counties.

Based on the evidence so far, it appears that St. Louis County successfully implemented vote centers without state guidance and without other state-level convenience options available, like expanded voting by mail. We tend to think that these are poor conditions for instituting significant election reforms; however, our study suggests that might not be the case. In this comparison, the state requirements in California did not seem to yield a smoother transition to vote centers, although the evaluations are largely positive in Fresno County. Larimer County, Colorado, pioneered vote centers under somewhat similar circumstances, including relying on a creative reading of state law (Montjoy 2008: 795). Careful local

preparation and extensive efforts to communicate the new procedures to the voting public, as was done by St. Louis County, are needed for positive performance of new voting rules. Regardless of state requirements, LEOs can learn what works and what does not from their counterparts in other states. St. Louis County studied successful and unsuccessful instances of vote center implementation in other parts of the country before making the transition (Bilchik 2020).

As more jurisdictions consider vote centers, it is important for local election officials to determine the best way to adapt the vote center model to their electorate and state and local conditions. There is no uniform “best” way to implement vote centers. The United States has a wide range of local election ecosystems, reflecting the variation in state laws, local practices, and conditions on the ground. LEOs occupy a unique position to understand election processes, local constituents, and conditions, and how those factors interact with state and federal laws. Local election officials’ preparation and approach to communicating reforms to voters and training poll workers on changing laws and processes is critical to the successful implementation of election reforms.

TABLE 6. SUMMARY OF MEAN RESPONSES BY COUNTY FOR HYPOTHESIS TESTS

<i>Question and response options:</i>	<i>Fresno County</i>	<i>St. Louis County</i>	<i>t-test results</i>
H3: [In 2020] How many voters at your location waited for more than an hour to vote? (1 = most voters, 2 = less than half of all voters, 3 = a few voters, 4 = none)	3.88 (0.05)	3.18 (0.03)	−12.234***
H4: Do you prefer letting voters go to any polling location or do you prefer assigning each voter to a local polling place? (1 = Any location, 2 = Assigned location)	1.07 (0.03)	1.05 (0.01)	−.927

Notes: Don’t know was excluded from analyses. * $p < 0.05$. ** $p < 0.01$. *** $p < 0.001$.

AUTHOR DISCLOSURE STATEMENT

None

FUNDING INFORMATION

Learning from Elections grant from the MIT Election Data & Science Lab.

SUPPLEMENTARY MATERIAL

Supplementary Appendix A
 Supplementary Appendix B
 Supplementary Appendix C
 Supplementary Appendix Table S1
 Supplementary Appendix Table S2
 Supplementary Appendix Table S3
 Supplementary Appendix Table S4

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Received for publication August 31, 2023; received in revised form January 31, 2024; accepted April 1, 2024; published July 8, 2024.