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Reprecincting and Voting Behavior

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Abstract Despite the expansion of convenience voting across the American states, millions of voters continue to cast ballots at their local precincts on Election Day. We argue that those registered voters who are reassigned to a different Election Day polling place prior to an election are less likely to turn out to vote than those assigned to vote at the same precinct location, as a new precinct location incurs both search and transportation costs on reassigned voters. Utilizing voter file data and precinct shape files from Manatee County, Florida, from before and after the 2014 General Election, we demonstrate that the redrawing of precinct boundaries and the designation of Election Day polling places is not a purely technical matter for local election administrators, but may affect voter turnout of some registered voters more than others. Controlling for a host of demographic, partisan, vote history, and geospatial factors, we find significantly lower turnout among registered voters who were reassigned to a new Election Day precinct compared to those who were not, an effect not equally offset by those voters turning to other available modes of voting (either early in-person or absentee). All else equal, we find that registered Hispanic voters were significantly more likely to abstain from voting as a result of being reassigned than any other racial group.

Keywords Voter turnout · Precincts · Gerrymandering · Elections · Florida · Election Administration

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Prior to every election, millions of eligible citizens across the country are tasked with locating and travelling to their assigned Election Day precincts to cast their ballots. For most “habitual” voters (Plutzer 2002; Gerber et al. 2003), this biennial ritual is often routine, entailing only minimal “search” and “transportation” costs (Brady and McNulty 2011; Haspel and Gibbs Knotts 2005). In most cases, the location of registered voters’ Election Day polling places—town halls, schools, community centers, churches or temples, fire stations—remain unchanged from previous years. Attendant costs for prospective voters to ascertain the location of their Election Day polling stations are thus often understood as being negligible.

Furthermore, in a growing number of states, voters now have an array of ballot delivery systems from which to choose, which presumably reduces even further the costs of voting. A generation ago, when scholars identified the effects of institutional barriers on voter turnout (Wolfinger and Rosenstone 1980), nearly all eligible voters had but a single day to exercise their franchise. Today, prospective voters no longer face the constraints of appearing at their designated polling station on the first Tuesday after the first Monday in November, between, say, 7 am and 7 pm, regardless of the weather or delays at the polls. From casting an early in-person ballot at a remote polling center to voting a no-excuse absentee ballot by mail or in person, millions of Americans are no longer geographically nor temporally bounded by where and when they may cast their ballots. Not surprisingly, given the expansion in both the mode and timing of voting across the American states, casting a ballot on Election Day is becoming a rarer event for many voters (McDonald 2009). With so many options available, many voters appear to be avoiding all costs associated with locating and getting to their Election Day polling stations.

Still, millions of Americans *do* continue to vote at their local precincts on Election Day. For now, we lay to the side the debate over the merits and turnout effects of “convenience voting” (Gronke and Miller 2012; Burden et al. 2014). Instead, we focus on a rather inconspicuous and routine election administration task that is regularly carried out by nearly all local election officials—the drawing of precinct boundaries and the selection of Election Day polling places. With the exception of two prominent studies (Brady and McNulty 2011; Haspel and Knotts 2005), scholars have not fully investigated how altering Election Day precinct boundaries and their accompanying polling locations may affect voter turnout, even though such changes may raise both the search and transportation costs for some voters.

The reason for the scholarly neglect is likely twofold. First, given the politically charged “voting wars” (Hasen 2012), the largely administrative decision of how precinct boundaries should be shaped and where polling stations should be located lacks a certain cachet. The high profile election and voting rights legislation in several states (and subsequent litigation) over controversial issues such as the requirement of strict photo voter IDs or the expansion (or contraction) of in-person early voting may be leading observers to look askance at the (re)location of Election Day polling places. Second, there is a presumption that the drawing of precinct boundaries and the designation of Election Day polling places is purely a technical matter. Reprecincting is often seen as a largely apolitical, efficiency-oriented means

of reducing the costs of holding elections, especially as the proportion of non-precinct early voting continues to rise in many jurisdictions.

Given the highly partisan voting wars in Florida since the 2000 presidential election (Hasen 2012), we are perhaps not as sanguine as Brady and McNulty (2011) or Haspel and Knotts (2005) to think that the process of reprecincting is largely devoid of political considerations. In their study of voter turnout in the 2001 Atlanta mayor election, Haspel and Gibbs Knotts (2005) find—contrary to their expectations—that voters whose Election Day polling station had moved were actually more likely to turn out than those whose station hadn't, even after controlling for the distance to the polls and a host of other individual-level and neighborhood factors. They reason that higher turnout among registered voters whose polling stations had been relocated may have been due to the *increase* in the total number of polling stations in the city, or, perhaps, because election administrators had mailed out postcards with the new location to these reassigned voters, thus mitigating additional information costs. Brady and McNulty (2011) find a decrease in turnout among those assigned to a new polling location, but take great pains to show that the reprecincting done in their case study was technical in nature, with the Los Angeles Registrar of Voters consolidating precincts in a nearly random fashion. The methods they use to correct for the possible non-randomness in the reassignment of precincts are appropriate in their effort to isolate the possible effects of some voters having to search for and get themselves to new polling locations.

We suggest, however, that the effect on voter turnout when Election Day polling stations are altered is not necessarily an unintended side effect. As many state's local election administrators are elected partisans (Kimball et al. 2006), the process of assigning polling places may not be an apolitical decision. Indeed, the introductory hook of Brady and McNulty's (2011: p. 115) study is an example from Houston, Texas where polling locations appeared to have been maliciously manipulated by local election officials. The geographic clustering and sorting of voters by party (Bishop 2008; Levendusky 2009) in many areas makes targeted disruptions of Election Day polling place continuity for electoral gain a distinct possibility. Election administrators may have ulterior motives when assigning a polling place, as it is certainly possible that the location or the distance to the polls might negatively affect the likelihood of some registered voters to turn out, especially those who do not have access to transportation, as Haspel and Knotts (2005) found in Atlanta. Though not entirely analogous, the redrawing of precinct lines by local election administrators could be subject to something quite like the gerrymandering of legislative districts, with strategic aims at play.

In what follows, we examine a recent decision by a county Supervisor of Elections (SOE) in Florida in 2014 to reconfigure the boundaries of some precincts and reduce the number of Election Day polling stations prior to the general election. Unlike thousands of other routine administrative decisions made by local elections officials to redraw precinct boundaries and designate polling stations, we argue that the 2014 redrawing of precinct boundaries and relocating of polling stations by the Manatee SOE was its own form of gerrymandering—the intentional manipulation of precinct boundaries so as to favor or disfavor racial or ethnic groups or a political

party. After briefly describing the reprecincting timeline as it unfolded in Manatee County, we offer a theory as to why some elections officials might use the power of the pen to redraw precinct boundaries for partisan reasons, notwithstanding the declining rate of voting on Election Day in many regions of the country, that hinges on the habituation of some Election Day voters. We then describe the data and methods we use to show that the decision to move Election Day polling places in Manatee County did not affect all groups equally, as Democrats, racial and ethnic minorities, and younger voters were disproportionately more likely to be moved to a new polling station. After documenting that the Manatee Supervisor of Election's decision to relocate some Election Day polling places does not appear to have been random, we then show that even seemingly marginal changes to Election Day polling locations altered the decision of some eligible voters to turn out to vote—by any available mode—more so than other registered voters.

The Politics of Reprecincting in Manatee County, Florida

Manatee County, located south of Tampa Bay on the Gulf Coast, is a typical Florida county. Medium sized, its population of roughly 350,000 is largely non-Hispanic white (73 %); blacks compose about 9 % of the population, and Hispanics a little more than 15 %. According to the May 2014 voter file, of the nearly 200,000 registered voters, whites are disproportionately more likely to be registered to vote, composing 84 % of the electorate, compared to less than 7 % black and less than 5 % Hispanic. Over 42 % of those registered in the county are Republicans, with Democrats making up about one-third of the electorate and No Party Affiliates (NPA) about one-fifth. Manatee County's Supervisor of Elections, like nearly all of the 67 SOEs in the state, is elected for a four year term in a partisan election, and any changes to precincts in the county must be approved by a partisan county commission.

Since the release of the 2010 U.S. Census, the drawing of precinct lines and the placement of Election Day polling places in Manatee County have not been without controversy. In the 2010 election cycle, the county was divided into 127 precincts. Due to the increase in no-excuse absentee and early in-person voting at the expense of Election Day voting, the former SOE, Bob Sweat, trimmed the number of polling stations from 127 to 113 before the 2012 general election (Wallace 2012). Prior to the 2014 general election, newly elected SOE, Mike Bennett, recommended that the county make further reductions to Election Day precincts, cutting the number of polling stations to just 70.¹ In a February 1, 2014 memo to the Manatee Board of County Commissioners, Bennett (2014) justified this further reduction in the number of polling places. "Voter turnout has not decreased," Bennett wrote, as "voters are just choosing to use more convenient methods to vote." He pointed out

¹ In 2013, the Manatee County Supervisor of Elections consolidated precincts after the 2012 General Election and before the 2014 midterm election for a low-turnout special referendum election, which temporarily reduced the number of precincts to 99. Unlike the redrawing done in 2014, this was, with just one exception, a purely merging-type reprecincting akin to Brady and McNulty's (2011) case, rather than a situation where precincts were permanently split.

correctly that that “[t]he trend across the entire state has shown a steady climb in early voting, and vote by mail” which “gives me confidence that precinct consolidation is the right thing to do.” Polling place consolidation would, according to Bennett, allow the county to more easily staff its polling locations, look at purchasing new tabulation equipment, and afford the county “monetary savings.” Bennett’s arguments present a picture of an innocent, nonpartisan process.

Yet, there is good reason to think reprecincting in Manatee County, as in other counties in Florida and beyond, does substantially differ from Brady and McNulty’s (2011) study of how Los Angeles County temporarily consolidated polling locations prior to the October 2003 Special Election, as well as Haspel and Knott’s (2005) study of the relocation (and modest expansion) of polling locations before the 2001 Atlanta mayoral election. In contrast to what they take assume to be the standard relocation of polling stations “as a result of the redistricting that followed the 2000 census” (Haspel and Knotts 2005: 565), or what Brady and McNulty (2011) report as a largely technocratic and nonpartisan single-mindedness to reduce election costs by the Los Angeles County Registrar of Elections, there is evidence that the permanent reprecincting and reduction in the number of polling stations in Manatee County in early 2014 was not done dispassionately, with blind disregard of the partisan (or racial or ethnic) makeup of existing precincts. The SOE in Manatee County who was behind the process, Mike Bennett, was a proud Republican partisan, fully engaged in the hard-knuckled politics of electoral engineering. A self-described “hell-raiser” (Thomson 2012), the former state lawmaker whose constituencies included portions of Manatee County had received national attention when he cosponsored Florida’s infamous House Bill 1355 (Herron and Smith 2012, 2013). Among other controversial provisions, the successful omnibus election-reform bill eliminated address updates on Election Day, placed restrictions on individuals and groups engaged in voter registration efforts, and reduced both the number of days for early voting as well as the number of hours in each day it would be available, including removing voting on the final Sunday before Election Day, a date disproportionately popular with black voters in the state. During the debate over HB 1355 on the Senate floor in May 2011, then-Senator Bennett (R-Bradenton) gained notoriety when he argued that voting was “a privilege,” saying (Sharockman 2011):

Do you read the stories about the people in Africa? The people in the desert, who literally walk two and three hundred miles so they can have the opportunity to do what we do, and we want to make it more convenient? How much more convenient do you want to make it? Do we want to go to their house? Take the polling booth with us? This is a hard-fought privilege. This is something people die for. You want to make it convenient? The guy who died to give you that right, it was not convenient. Why would we make it any easier? I want ‘em to fight for it. I want ‘em to know what it’s like. I want them to go down there, and have to walk across town to go over and vote.

Given his passionate statements in 2011 as a state Senator, in which he stridently defended Republican-sponsored legislation that would later be undone by a federal court (Herron and Smith 2014), many observers were understandably skeptical

about the motives underlying Bennett's decision to redraw precinct boundaries and alter polling station locations three years later, after being term-limited out of the Senate and winning office as an SOE. The announcement of the new precincts was immediately criticized by county Democrats and the local chapter of the NAACP for intentionally targeting racial and ethnic minorities (Kennedy 2014). Yet, Bennett's newly proposed lines and polling locations were largely preserved, with the seven-member Board of County Commissioners supporting the new precincts by a 6 to 1 vote. Only one commissioner—the sole Democrat on the Board—opposed the new boundaries and polling stations (Kennedy 2014).

As Fig. 1 reveals below, Bennett's newly proposed boundaries did not merely consolidate existing precincts. The 38 % reduction in precincts, from 113 to 70 Election Day polling locations, also split existing precincts into as many as four newly drawn precincts, the borders of some straying only a few blocks from the current jurisdictional lines.

The descriptive statistics of which registered voters were drawn into a new polling location versus which voters retained their previous polling place, as presented in Table 1, shows that various demographic groups were not equally affected by the reprecincting done by SOE Bennett's office. Overall, 42.4 % of the 177,269 registered voters whose addresses did not change between 2012 and 2014 were assigned to new polling locations. Black registered voters were disproportionately likely to be reassigned, with a majority having to seek out an Election Day polling location that was different than in 2012. Hispanic registrants were less affected, but still more likely than whites to be reassigned to a new polling location.



Fig. 1 2014 precincts (black outline) over 2012 precincts (grey-scale shapes), Manatee County. Portions of the city of Bradenton, outlined in the top map with a dashed line, presented in greater detail in the bottom map

Table 1 Percent reassigned to new polling locations by demographic and precinct characteristics

	Same polling	New polling location
All registered voters	57.60 % 102,109	42.40 % 75,160
Race		
White	58.89 % 88,210	41.11 % 61,574
Black	46.59 % 5646	53.41 % 6473
Hispanic	52.17 % 4419	47.83 % 4052
Other	55.61 % 3834	44.39 % 3061
Party		
Democrat	55.16 % 31,995	44.84 % 26,007
Republican	59.79 % 45,058	40.21 % 30,297
NPA/other	57.06 % 25,056	42.94 % 18,856
Age		
18–29	53.65 % 9857	46.35 % 8517
30–64	57.51 % 54,718	42.49 % 40,435
65+	58.88 % 37,534	41.12 % 26,208
Distance from polls, 2012		
Nearest quartile	53.17 % 23,514	46.83 % 20,712
Second	60.59 % 26,811	39.41 % 17,442
Third	58.93 % 26,047	41.074 % 18,153
Farthest quartile	57.70 % 25,515	42.30 % 18,703
Registered voters per precinct, 2012		
Smallest quartile	48.42 % 22,048	51.58 % 23,490
Second	41.20 % 18,501	58.80 % 26,407
Third	66.81 % 28,719	33.19 % 14,266
Largest quartile	74.91 % 32,841	25.09 % 10,997

Each cell reports percentage on top, raw counts on bottom. Cutpoints for distance quartiles are 0.3692 miles, 0.6432 miles, and 1.0866 miles. Cutpoints for precinct populations are 1582 registered voters, 2382 registered voters, and 3331 registered voters. χ^2 tests for all tables are significant at $p < 0.001$

The differences by party were more subtle, but Republicans were considerably less likely to be assigned a new polling place, about 3.5 % less than their Democratic counterparts. Likewise, younger voters were more likely to be affected by the Election Day precinct changes than retirement-age voters.

The final two statistical categories for those who were reassigned and those who were not are broken down into quartiles and have non-linear patterns. The quartile of registered voters who lived nearest to their polling locations in 2012—those whose locations were the most convenient in terms of transportation and searching costs—were the most likely to be assigned new polling locations prior to the 2014 general election. Those registered voters living in the second distance quartile were most likely to retain their old polling location, with diminishing percentages thereafter. Not surprisingly, as consolidation was one of the stated goals of the Manatee SOE, voters in precincts with the largest number of registered voters were the less likely to be reassigned, though we find that those residing in the smallest quartile of 2012 registered voters per precinct were more likely to retain their polling place than the second quartile.²

To be sure, the mid-decade 2014 reprecincting in Manatee County, much like the processes in Atlanta (Haspel and Knotts 2005) and Los Angeles County (Brady and McNulty 2011) that occurred more than a decade ago, inevitably informs how scholars theorize about a common, but not well studied, local administration process. That some local election administrators might try to electorally engineer (Grofman and Liphart 1986) the rules of the game should not come as a surprise to observers in the trenches (Streb 2012; Norris 2004). Knowing that the reprecincting process in Manatee County affected various groups in different ways, we now turn our attention to how voter turnout might be affected by reprecincting.

Theorizing about Reprecincting

Given the “quiet revolution” (Gronke and Miller 2012) of convenience voting across the states which has expanded the voting opportunities for millions of registered voters, one might be especially dubious about linking voter turnout to changes of Election Day precinct boundaries and polling locations. In some states, such as Oregon, Washington, and most recently Colorado, all-mail elections have made Election Day precincts archaic. Manatee County SOE Bennett is correct that over the past two decades, casting a ballot has become considerably easier for millions of Americans, including many Floridians. Yet, extant scholarship on the effects of convenience voting on voter turnout is decidedly mixed (see Berinsky 2005; Neeley and Richardson 2001; Hanmer and Traugott 2004; Southwell and Burchett 2000; Fitzgerald 2005; Herron and Smith 2014; Stein 1998; Gronke 2008; Stein and Vonnahme 2010; Burden et al. 2014; Biggers and Hanmer 2015).³

² The patterns described hold when joined in a logit model, with retaining the same polling location as the dependent variable (results not shown). Distance, precinct population, and race are the most substantial variables in the model.

³ The expansion of opportunities to vote has recently hit some speed bumps. Some state legislatures and elections officials have rolled back existing reforms aimed at expanding the electorate (Scher 2011; Wang

Though the verdict is still out as to whether convenience voting increases an individual's likelihood of turning out to vote, the introduction of alternative methods of casting a ballot has complicated the calculus of voter turnout. Modeling a voter's decision to cast a ballot has become considerably more complex than it was when Downs (1957) and Riker and Ordeshook (1968) expounded on the rational choice of turning out. With the advent of more convenience voting opportunities in the form of early voting and absentee mail ballots, the ability of scholars to specify the possible costs for voters when choosing to cast a ballot under seemingly innumerable permutations is a technical nightmare.⁴ Those who are registered before Election Day in most states (and even eligible individuals who are not registered in some states) have many more options available to them when deciding whether to vote. As such, many registered voters have gravitated towards newly available modes of voting—requesting and mailing in an absentee ballot or voting in person at an early voting center outside the lines of their designated Election Day precincts. From a rational choice perspective, potential voters now have even more considerations when weighing the cost-benefit tradeoff of turning out to vote (Aldrich 1993).

Additionally, if the habit of turning out to vote (Plutzer 2002) is grounded in repetition, the availability of new modes of “convenience” voting does not necessarily make voting equally more convenient for all registered voters. “For turnout, like a great many behaviors” Aldrich, et al. (2011: p. 536) note, “the context is not fixed, and so we must consider not only the repetition of that behavior but also whether those repetitions are made in similar contexts.” For some registered voters, whose likelihood of turning out is “automated through behavioral repetition” (Aldrich et al. 2011: p. 536), the new modes of voting may not be any more convenient than casting a traditional ballot on Election Day. As much driven by habit as structural constraints or perception, the utilization of more “convenient” modes of voting may be circumscribed for many potential voters. Because convenience voting is not “self-actuating,” as Stein et al. (2005) argue, the ability of

Footnote 3 continued

2012; Herron and Smith 2014; Herron et al. 2016), or have even erected new barriers—such as strict photo ID laws—due to concerns over the risk of electoral fraud (Hicks et al. 2015). Notwithstanding the recent reversals on convenience voting, some scholars have argued that the very institutional expansion of convenience voting—to say nothing of the recent reversals—may actually lead to lower turnout. Early voting “has created negative unanticipated consequences by reducing the civic significance of elections for individuals” Burden et al. (2014: p. 95) suggest, “altering the incentives for political campaigns to invest in mobilization.” Beyond the aggregate effects of diminishing turnout, others have suggested that such expansionary reforms may even have a “compositional effect,” exacerbating “socioeconomic biases of the electorate” (Berinsky 2005).

⁴ For example: how many days of in-person early voting does a state offer, and how many days prior to Election Day does it commence and end? Is early in-person voting offered on weekends, or after normal business hours? What proof does a voter need to provide to receive a no-excuse absentee? How easy is it for a voter to be placed on a “permanent” absentee voter list and is return postage included? May absentee ballots be picked up by voters in person before an election, or dropped off before Election Day, or received or postmarked by Election Day? What constitutes an acceptable photo voter ID? Are reforms enforced uniformly across all local jurisdictions? When operationalizing these election reforms, scholars often rely on dichotomous indicators (see, for example, Burden et al. 2014), which may over-simplify the true variation in contexts.

some potential voters to shift to non-precinct, non-Election Day modes of voting may depend on the existence of mobilization efforts by various political parties and interest groups. For voters who have become habituated to vote on Election Day due to “behavioral repetition” (Aldrich et al. 2011: p. 536), especially those lacking material resources or not trusting alternative modes of convenience voting, a minor change in the location of an Election Day polling place might dampen turnout.

Thus, however ostensibly technical and random the changes, any decision to alter the location of Election Day polling stations may have a disruptive effect on a voter's likelihood of going to the polls. In Florida, as in other states offering convenience voting, some people have become more habituated voters over time, voting early in-person, mailing in an absentee ballot, or waiting to vote on Election Day. Unless additional information is provided to voters, the costs borne by usual Election Day voters—seeking out and getting to the correct polling station—are expected to rise when election administrators change polling stations (Haspel and Gibbs Knotts 2005: p. 565). Ritualized Election Day voters—particularly those who are younger, less educated, and less mobile—might have considerable difficulties voting on Election Day if their polling station has been moved prior to an election. Although local election officials in Florida and elsewhere are required to inform voters about any changes to their assigned polling places, potential voters who wait until Election Day to cast ballots bear the full cost of searching for and getting to the polls, as voting early in-person or mailing an absentee ballot are no longer available options. And although many local elections officials may provide substantial voter education outreach and public service announcements to provide additional information about the closing of traditional polling places and the opening of new venues, there remain real “search” and “transportation” costs for potential voters (Brady and McNulty 2011: p. 117).

The notion that altering a precinct boundary (with or without moving a polling place) might have an effect on voter turnout is not too unlike research showing that turnout can be affected by the redrawing of legislative districts (Cox et al. 2002). Compared to the more visible and often highly political and partisan decennial process of drawing lines around populations—the gerrymandering of legislative districts—the decision by local election officials to draw precinct boundaries and locate polling stations, on the surface at least, appears to be much more innocuous. Indeed, neither of the systematic studies by Haspel and Gibbs Knotts (2005) and Brady and McNulty (2011) reflect the dynamics at play in Manatee County, where anecdotal evidence suggests that reprecincting was conducted with electoral, if not also partisan, gains in mind. Brady and McNulty's analysis of precinct consolidation in Los Angeles did not involve the cracking of voters in existing precincts into newly created precincts, which clearly happened in Manatee County. There was no indication, according to Brady and McNulty (2011: p. 116), that the Los Angeles Registrar of Elections split or fragmented existing precincts or broke apart larger precinct boundaries; rather, the elections chief of the California metropolis only consolidated adjacent precincts to create a fewer number of larger ones which were “nearly randomly assigned.”⁵ Similarly, in the 2001 mayoral race in Atlanta, as

⁵ Arguing that the consolidation of precincts in Los Angeles County was conducted in a nonpartisan fashion, Brady and McNulty (2011: p. 116) report there was “no indication that the Los Angeles County

Haspel and Knotts (2005) note, the number of Election Day polling locations in Atlanta actually increased slightly due to splits caused by the 2000 legislative redistricting process. Contrary to the deference Brady and McNulty (2011) show to the Los Angeles Registrar of Elections, or the suggestion by Haspel and Knotts (2005) that the Atlanta reprecincting was the result of statewide redistricting in 2000, we are considerably more dubious that most local election supervisors draw precinct boundaries neutrally.⁶

Data, Methods, and Expectations

What are the turnout effects of polling place reassignment if it goes beyond the mere consolidation of polls and is not done randomly, but rather with consideration of the composition of the electorate? As should be clear, the theoretical priors that inform our empirical investigation into Manatee County's decision to reduce the number of Election Day polls diverges from Brady and McNulty's (2011) analysis of poll consolidation in Los Angeles. Most notably, our research design assumes, a priori, that the assignment of new polling places and the drawing of new precinct lines by local election officials are *not* likely to be done randomly, nor in a nonpartisan or race-neutral fashion. In fact, we decided to examine the mid-decade reprecincting in Manatee County because we were interested in isolating potential effects on turnout when local elections officials may intentionally be trying to alter precinct lines and polling places to advantage or disadvantage different groups of registered voters. Here, we are in agreement with Brady and McNulty's (2011: p. 116) observation that "there is a potential for major impacts if systematic attempts are made to disrupt voting in precincts that all lean in one partisan direction." We differ only in that we think the opportunity for manipulation during reprecincting might actually be more the norm than the exception. In short, the possibility of non-random, partisan, and racially biased—albeit latent—gerrymandering of precinct boundaries and polling locations might not be a rarity.

To assess the impact of reprecincting on voter turnout in Manatee County, we begin by defining our universe of registered voters who were affected by the boundary and polling place changes. We do so by comparing two discrete snapshots

Footnote 5 continued

Registrar of Elections manipulated polling locations so as to change more polling locations for those registered with one rather than the other major party." Rather, they emphasize that the consolidation of precincts and moving of polling stations in anticipation of the 2003 special election—which reduced the number of polling stations from 5231 to 1885—was carried out to reduce costs. Yet, in an early draft of their article, Brady and McNulty (2004: pp. 2–3) noted that across California prior to the Recall election, "Not every county consolidated precincts. In fact, most did not. Despite the cost factor, county administrators were loath to risk the possibility of a decline in voter turnout—and an increase in voter complaints—bound to occur given changes in long established polling places and a decrease in the density of the polling places offered."

⁶ Some local elections officials are required, statutorily, to split or consolidate precincts, altering their geographic boundaries, as well as find alternative polling stations. In Virginia, for example, state law limits the number of registered voters in each precinct, forcing local elections officers to alter district boundaries with some frequency.

of the dynamic Florida voter registration “file”: the first from March 30, 2013 (i.e., following the 2012 election),⁷ and the other from January 7, 2015 (i.e., following the 2014 election).⁸ The Florida voter file is actually comprised of two parts. The first (“Voter Extract”) includes an entry for each registered voter, labeled by a unique voter ID number that stays constant in the case of the voter changing addresses within the state, and records information like the address of residence, race and ethnicity, gender, birth date, as well as columns identifying which precinct and districts at various levels of government the voter resides in. The second part of the file (“Voter History”) has entries for each election each voter participated in, indicating the date of the election and the method the voter used to cast his or her ballot (e.g., at the polls, early, absentee, provisional).

By pairing voter IDs across the two snapshots and looking at the address of residence field, we can divide the universe into three groups: (1) registered voters who stayed registered at the same residence between 2012 and 2014 (177,269 people), (2) registered voters who moved within the county during that period (18,950 people), and (3) registered voters who either left the county’s rolls or were added to it (23,124 and 29,620 people, respectively). We focus our analysis on the first group, excluding all registered voters who moved between the two elections. Non-movers can further be separated into two groups: those who retained the same polling location for the 2012 and 2014 elections, and those who were assigned to a new location. Since the numbering scheme changed in the reprecincting process—and, regardless, polling locations can change across elections independent of precinct boundary changes—we requested and received lists of the polling locations used for each precinct for both elections from the Manatee County SOE office. We then used these lists to pair precinct numbers representing the same location across the two snapshots. Nearly 58 % of non-movers retained the same polling location across 2012 and 2014.

To test the effect of being reassigned to a new polling location both on turnout and the method of voting, we run a multinomial logit model at the individual level, with the dependent variable representing the vote (or non-vote) method in 2014: Election Day voting, early voting, absentee voting, and abstaining as the base category.⁹ The independent variable of interest is a dummy variable marked 1 if a

⁷ The January 2013 statewide voter provided by the Florida Division of Elections was corrupted, and was not cleaned until March, 2013. See Herron and Smith (2014). We excluded those who registered to vote after the state’s 29-day registration cutoff, as they were ineligible to vote in the 2012 election. Furthermore, Florida allows for 16- and 17-year-olds to pre-register to vote; those who had not yet turned 18 by the 2012 election were also excluded.

⁸ On this point, our research design differs from Haspel and Knotts (2005: 536), who report using a single voter file obtained by the Georgia Secretary to determine a voter’s residence, Election Day polling location, and turnout in the 2001 Atlanta election. Because they use a single snapshot from the voter file, they are unable to control for whether a voter in the 2001 mayoral election previously had resided at the same residence. In addition, they make no mention of whether voters who cast ballots in the mayoral election cast absentee ballots (as was permitted at the time in Georgia), rather than voting in person at their local precinct.

⁹ According to the 2015 voter file, 239 voters were coded as casting absentee ballots that were rejected; these were merged into the absentee voting category despite them not actually being counted. There were 33 voters who cast provisional ballots, 25 of which were accepted and were coded as to whether they were cast early or on Election Day (2 and 23, respectively), and were similarly merged into their respective categories. Since the remaining 8 rejected provisional ballots were not separated by the Florida “Vote

registered voter retained the same polling place between 2012 and 2014. We expect the coefficient for those voters who retained their Election Day polling place after reprecincting will be positive for turnout on Election Day in 2014, but negative for early in-person and absentee outcomes, replicating the substitution effect found by Brady and McNulty (2011).

As control variables, we include a range of individual-level demographics available from the statewide voter file. The major explanatory force are three dichotomous variables for the vote method used in 2012, broken down the same way we code our dependent variable (Election Day, early in-person, absentee) with non-voters as the excluded category. We expect those who voted in 2012 to be more likely to vote in 2014 than those who did not vote, and we expect continuity in their method of voting. We also include a dummy for “supervoters,” which is marked 1 for those who voted in 2008, 2010, and 2012 (and 0 for all others). We expect the coefficient for “supervoters” to be positive, even exceeding the explanatory power of the three modes of 2012 vote dummy variables. Similarly, we include a variable indicating the number of years the voter has been registered in Florida; even among non-supervoters, we expect voters registered longer to be more likely to turn out to vote than relatively new registrants. We include dichotomous variables for voters registered as Democrats and Republicans, with No Party Affiliates (NPA) and third-party registrants as the excluded category. Given the competitive partisan landscape—the 2014 election in Florida had a high-profile governor’s race that was expected to be, and ultimately was, quite close—and the usual drop-off of (often independent and Democratic) low-propensity voters in midterm elections, we expect the partisan dummies to be significantly positive relative to the excluded NPA category, and for the Republican coefficients to be larger than the Democratic coefficients.

We decompose race and ethnicity into four dummy variables: black, Hispanic, other non-white, and white (as the excluded category). We expect the relatively high minority turnout in the 2012 general election to recede in 2014 relative to white turnout, giving these coefficients a negative sign relative to the likelihood of white registrants turning out to vote in the midterm election. We include a variable for age, which we expect to be positive, and a dummy variable for male registrants as a control variable with no expectation that men will be more likely than women (who we combine with those registrants who chose not to identify their gender, as they make up less than 1 % of the universe) to turn out to vote.

As shown in Table 1 and as discussed above, Manatee County’s reprecincting affected some registered voters more than others depending on where they lived in the county. One factor was distance from the polling location in 2012; to address this, we calculated the actual distance to the polls both pre- and post-reprecincting for all voters who did not move their residence between the 2012 and 2014 voter file snapshots. Utilizing advancements in GIS, scholars have employed different techniques to calculate proximity to the polls. Many of these studies have consistently found a negative relationship between spatial distance to the polls and

Footnote 9 continued

History” file into early or Election Day voters, we merged them into the Election Day category, as this was the most likely scenario.

voter turnout. Early attempts, including Gimpel and Schuknecht (2003), used precinct-level data from Montgomery County, Maryland, to gauge the location of a voter's precinct polling place and its population centroid in order to estimate voter turnout. Subsequent studies have used individual-level data to estimate distance to the polls. Dyck and Gimpel (2005) estimated Manhattan-block distance for voters in Clark County, Nevada, and Haspel and Knotts (2005) used actual road networks to estimate distance to the polls for voters in Atlanta, Georgia.¹⁰ Gimpel, Dyck, and Shaw's (2006) study, most notably, also takes into account the proximity of where voters live to the closest early voting site. By connecting distance to vote-choice method, they find that as the proximity to an early voting site becomes closer, a voter's likelihood to cast an early in-person ballot increases.

We calculate distance by geocoding the residential addresses provided in the January 2015 voter file for each voter in our universe—that is, turning a mailing address into geographic coordinates. Our first pass on the data was made with the Address Range Feature shapefile provided by the U.S. Census Bureau for this purpose, and using their suggested method with the software system ArcGIS (Census 2013). This method found locations for about 90 % of voters; the addresses of those who were not matched were fed through the Google Maps Geocoding API, which is more advanced, but has a cap on usage making it infeasible as a tool for the entire universe.¹¹ After the second pass, we accounted for 99.8 % of the addresses in the assigned universe. We also fed the precinct polling locations through the Google Maps Geocoding API, allowing us to calculate Euclidean distances by comparing voters' locations with their polling places' locations.¹² For those who had different polling locations, we also calculated the difference between the 2014 distance and the 2012 distance to their polling place. We expect that as distance to the polls increases, voting on Election Day will decrease and alternative methods will increase as a way to deal with the increased transportation and searching costs associated with Election Day voting. We expect a similar pattern with our change in distance to Election Day polling places variable for similar reasons.

Finally, following Stein et al. (2014), we include two variables that would suggest a greater propensity to use convenience forms of voting. First, we calculate the Euclidean distance for each voter to his or her nearest early voting site in the same manner as we calculated the distance to the voter's Election Day polling place. One of the benefits of early voting is that voters are not tied to a particular site; rather, voters are permitted to cast ballots at any of the three sites that Manatee County made available in 2014, so voters may have, for instance, chosen to vote near their workplace or on their way to go shopping. All else being equal, though, we expect voters to be most likely to vote at the closest early in-person voting site to their residence. Second, while Florida does not have a permanent absentee voter list,

¹⁰ Because they use a single Georgia voter file to geocode the addresses of registered voters, Haspel and Knotts (2005: p. 563) necessarily include the vote histories of previously registered voters who moved to Atlanta as well as registered voters who may have moved within Atlanta.

¹¹ At least, when only relying on the free service—paid options for heavy use are available.

¹² Google Maps Geocoding API coordinates are in the WGS 84 system, which we convert to NAD 83 to match those geocoded using Census data; distance calculations were made using the NAD 83/UTM 17 N projection, which is standard for the Florida peninsula.

it does have something similar: voters are allowed to make a request for a ballot to be mailed for all elections through the second general election from the time of the request. Voters who are mailed an absentee ballot may vote through other means (or choose not to vote at all), but for obvious reasons, we expect these recurring absentee list voters to be especially likely to vote absentee. The Florida Secretary of State makes available a list of those voters who signed up to be sent an absentee ballot in the 2014 General Election, which includes the date of the standing request; we chose a cutoff of January 31, 2014—that is, the day before Supervisor Bennett made his recommendation for precinct changes to the Board of County Commissioners—as the date for such voters to be coded as a “recurring absentee voter.”

Findings

We present the results of our voter turnout multinomial logit model in Table 2. Given the size of our dataset, it is unsurprising that nearly all of our coefficients are significant. Some of our results are also unsurprising: those who voted in the 2012 General Election were more likely to vote by any method than to abstain in the 2014 election, compared with those who did not vote two years earlier in the presidential election. We also find that the most likely method of voting in 2014 was the same method used in 2012.¹³ Similarly, older voters were more likely than younger voters, white voters more likely than non-white voters, and supervoters more likely than non-supervoters to vote by any method rather than to abstain in 2014. Republicans showed the highest likelihood of voting by any method, while Democrats were only statistically distinguishable from NPAs in being more likely to vote early.¹⁴

Our dichotomous variable marking whether a voter's polling place location was altered in 2014 confirms our expectations for Election Day voters. Registered voters who retained their polling place were more likely to vote on Election Day in 2014 (relative to abstaining) than those who were assigned a new polling location by SOE Bennett. However, we find no replacement effect based on polling location change, with insignificant coefficients for those who retained their Election Day polling place in both the early in-person and absentee voting models. All else equal, those voters who had their precinct altered prior to the 2014 election were no more or less likely to cast an early in-person or absentee ballot than those who retained their existing polling place.¹⁵

¹³ Also not surprising, overall turnout among those registered voters who maintained the same address in 2012 and 2014 was lower in the 2014 midterm election (53.9 %) compared to the 2012 presidential election (72.9 %). Overall turnout in 2014 among those voters who were not reassigned to a new polling station was 56.1 percent; overall turnout in 2014 among those who were reassigned a new polling station was 50.8 percent. Again, we are interested in the relative turnout rates among these two subpopulations—those keeping their polling station and those who were reassigned.

¹⁴ Data and replication code are publicly available at *Political Behavior* Dataverse, “Replication Data & Online Appendix for: Reapportioning and Voting Behavior,” <http://dx.doi.org/10.7910/DVN/XFHBPO>.

¹⁵ As a check on our method, we also ran a multinomial logit model weighted using Coarsened Exact Matching (Iacus et al. 2008; Stata implementation by Blackwell et al. 2009). Matching using CEM on variables significant across all three vote methods (2012 vote method, race, party, age, supervoter, recurring absentee ballot status, and distance to polls), as shown in the Online Appendix, Table A1, produces results substantively similar to our non-matching model: the gap in likelihood to vote on

Table 2 Multinomial logit model of vote method; excluded category is non-voting

	Election day		Early		Absentee	
	Coefficient	Std. error	Coefficient	Std. error	Coefficient	Std. error
Retained polling place	0.179**	0.031	0.030	0.054	0.030	0.037
Race/ethnicity: black	-0.255**	0.041	-0.441**	0.063	-0.772**	0.056
Race/ethnicity: Hispanic	-0.702**	0.054	-0.881**	0.099	-1.006**	0.079
Race/ethnicity: other non-white	-0.314**	0.057	-0.521**	0.098	-0.621**	0.072
Age	0.010**	0.000	0.021**	0.001	0.034**	0.001
Party: Democrat	0.048	0.030	0.160**	0.050	-0.009	0.036
Party: Republican	0.175**	0.029	0.209**	0.047	0.163**	0.033
Male	0.181**	0.014	0.261**	0.024	0.057**	0.017
Supervoter ('08, '10, '12)	1.429**	0.017	1.526**	0.028	1.181**	0.020
Distance to polls	-0.112**	0.009	0.358**	0.015	0.103**	0.010
Change in distance to polls	0.015	0.014	-0.195**	0.020	-0.029	0.015
2012: Voted election day	2.562**	0.024	2.255**	0.057	1.528**	0.031
2012: Voted early	2.475**	0.034	4.185**	0.060	2.543**	0.040
2012: Voted absentee	1.200**	0.032	1.958**	0.064	2.929**	0.031
Distance to early voting site	0.062**	0.024	-0.145**	0.007	-0.008	0.004
Recurring absentee voter list	-0.981**	0.050	-1.109**	0.083	1.126**	0.028
Years registered	0.003**	0.001	-0.003*	0.001	-0.001	0.001
Retain poll × black	-0.061	0.057	0.064	0.091	0.080	0.078
Retain poll × Hispanic	0.041	0.071	0.225	0.135	0.341**	0.103
Retain poll × other non-white	-0.124	0.075	0.159	0.133	0.146	0.096
Retain poll × Democrat	0.094*	0.039	-0.002	0.068	0.025	0.047
Retain poll × Republican	0.070	0.037	-0.046	0.063	-0.011	0.044
Constant	-3.762**	0.040	-5.933**	0.080	-5.232**	0.051

N = 176,906

* p < 0.05, ** p < 0.001

Looking at the other independent variables, distance to the voting site matters. Election Day location distance creates the expected effect, with those living nearer being more likely to vote at the polls and less likely to vote early or absentee. Early voting location distance is similarly intuitive, with those nearer to a site more likely to vote early and less likely to vote on Election Day (although with no effect on absentee voting). Those on the recurring absentee voter list are much more likely to vote absentee and less likely to vote early or on Election Day, and we find those registered for a longer period in Florida are more likely to vote on Election Day and slightly less likely to vote early.

Footnote 15 continued

Election Day between those who were and were not assigned a new polling location was 4.5 %, and the overall effect on turnout was 2.6 %. Both are significant differences at p < 0.001.

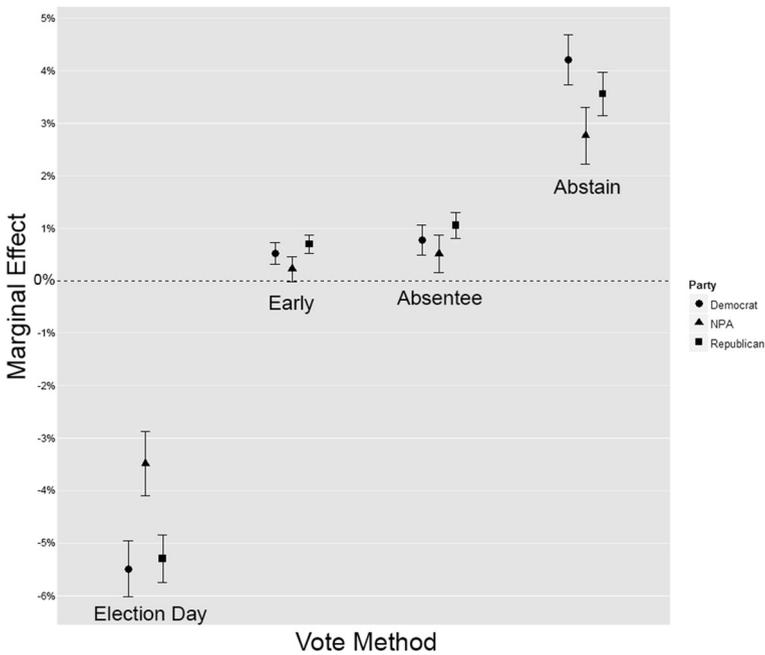


Fig. 2 Marginal effect of being assigned to a new polling location on 2014 vote method among 2012 Election Day voters, by registered party. Whiskers reflect 95 % confidence intervals

To make clearer the effect of changing polling locations, we present two figures illustrating the substantive effect of the multinomial logit model, Figs. 2 and 3. Both estimate the change in likelihood of voting by a particular method (or abstaining) for someone who voted at the polls on Election Day in 2012 if they were reassigned to a new polling location; Fig. 2 does so broken down by party registration and Fig. 3 does so for race and ethnicity.

General trends stand out immediately: those who were assigned to a new polling location were less likely to go to the polls on Election Day in 2014 and more likely to abstain than those who kept their polling location. These trends are less severe for NPA/Independent voters relative to partisans, and Democrats were more likely to be affected by polling location changes than Republicans. Furthermore, while those assigned new polling locations were more likely to vote early or absentee, the greater use of these convenience methods was not enough to make up the Election Day gap in total overall turnout.

The racial and ethnic trends broadly follow the partisan trends, but with larger differences between the groups. White voters showed the largest Election Day marginal effect of being assigned to a new polling location, with a predicted 5.2 % decline. However, they were significantly more likely to use a replacement method, with early in-person and absentee voting making up a combined 1.7 % of the gap. Reassigned black, Hispanic, and other non-white voters were actually less likely to vote absentee than those who retained their 2012 location, and among Hispanic and

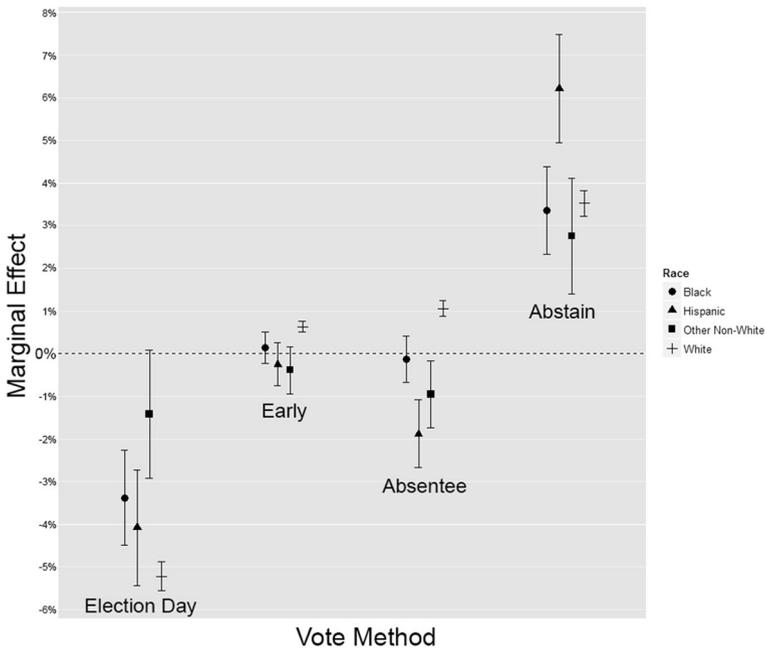


Fig. 3 Marginal effect of being assigned to a new polling location on 2014 vote method among 2012 Election Day voters, by race. Whiskers reflect 95 % confidence intervals

other non-white voters, this negative effect holds when combined with early voting. As a result, the significant difference between white voters and black and other non-white voters in the marginal effect of voting on Election Day is counteracted enough to make the differences fall within the 95 % confidence interval for abstaining, while Hispanic voters were significantly more likely to abstain as a result of being reassigned than any other race/ethnicity.

Figures 2 and 3 only address voters who cast a ballot at the polls on Election Day in 2012, as our expectation is that they are most likely to be affected by a change in polling location. Though we controlled for several variables that could potentially differ systematically between those who were assigned new polling locations and those who weren't, there may be unobserved factors driving our findings; voters who were given new polling places may have been less likely to turn out than those who weren't regardless of whether their polling place changed or not. By looking at those who voted early or absentee in 2012, we can get a rough check on this possibility, as they should be less affected by polling place changes, especially when looking at their propensities to vote early or absentee again. However, if we find that these reassigned non-Election Day voters were less likely to vote by the same method than those who retained their polling locations, the effect may be driven by unobserved characteristics rather than by the effect we are measuring. Figure 4 breaks down our universe of non-movers by voting method in 2012, and looks at the marginal effect of being reassigned on voting method in 2014.

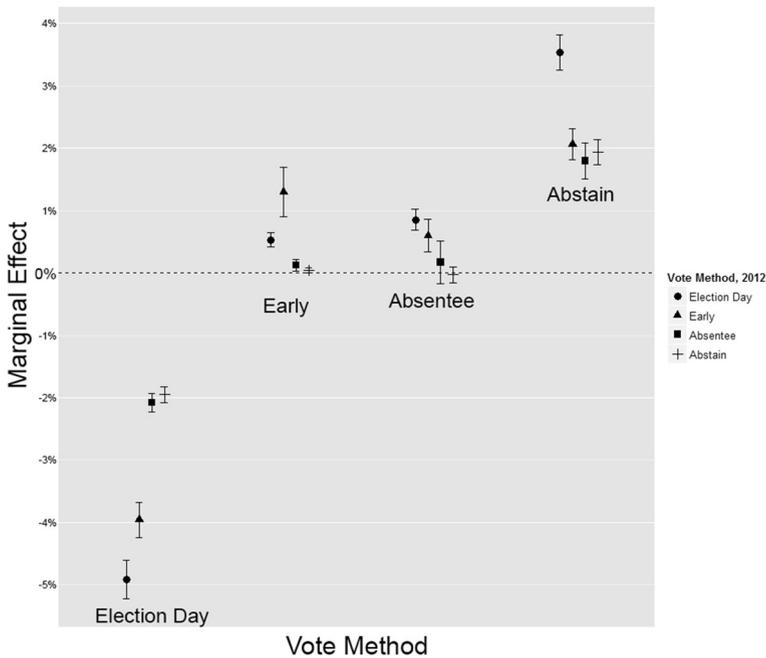


Fig. 4 Marginal effect of being assigned to a new polling location on 2014 vote method by 2012 vote method. Whiskers reflect 95 % confidence intervals

Again starting with a general overview, the patterns are broadly similar in Fig. 4 as those found in Figs. 2 and 3. There is a rise in abstention among those who were reassigned polling locations, even among early in-person and absentee voters, which suggests some unobserved variables may be driving some of the difference, but these declines are a product of a drop in Election Day voting, rather than in early and absentee voting. Furthermore, the gap in Election Day voting is much more pronounced among 2012 early in-person voters than absentee. A large reason for this is likely due to the difference in propensity to vote on Election Day among these two groups of voters: beyond abstainers continuing to abstain, absentee voters continuing to vote absentee had the highest probability among the 16 possible pairings of 2014 vote method given a 2012 vote method, at 53.7 %. Early in-person voters in 2012, however, were actually slightly more likely to vote on Election Day than to continue to vote early (27.9 vs. 25.9 %). This suggests that absentee voting is more of a habitual process than voting early in-person, especially given the recurring absentee status that is allowed in Florida. Additionally, voters who cast ballots early in-person in the past are better equipped to vote early again in the future, as the education costs have already been borne; in the face of uncertainty in their Election Day polling place, voting early is an easier replacement for these 2012 early voters than for the average 2012 Election Day voter. In any case, as we had expected, the polling place reassignment effect on turning out to vote is largest

among 2012 Election Day voters (3.5 %), an effect nearly twice as large as among 2012 early in-person and absentee voters (2.1 and 1.8 %, respectively).

But what is the substantive impact on turnout due to the reduction in Election Day precinct locations? Compared to the counterfactual in which no precinct locations were altered, our model indicates that turnout among non-movers likely decreased by 1609 voters (from a predicted 97,155 to the reality of 95,546) due to the altered precinct polling location, a drop of 1.7 %. The share of the vote cast by NPAs and third party registrants remains virtually unchanged in our model, but we find that the share of turnout among Democrats was depressed by 0.2 % due to the changes made, offset by an increase of 0.2 % among Republicans. This change in the partisan makeup of the electorate may seem modest, but it could have had an impact on down-ballot contests, especially at the county and municipal levels. And, of course, Florida is notorious for a top-of-the-ticket race being decided by just hundreds of votes, with national consequences in the 2000 presidential election.

With regard to race and ethnicity, our prediction of the counterfactual shows the smallest impact in turnout percentage on white voters. However, because the overwhelming share of voters in the 2014 election in Manatee County were white—about 90 %—they actually see the largest decrease in the share of the electorate in our model due to the polling location changes, at the expense of the other three racial and ethnic groups. Still, the decrease in share among the other racial and ethnic groups is noteworthy, especially Hispanic voters; our model predicts that there was a fall of 158 voters (from 2262 to 2420), a 6.5 % decrease, due to the change in Election Day precincts.

Conclusion

After more than a decade of “voting wars” in Florida and beyond (Hasen 2012), the possibility that local election officials might strategically utilize a prosaic process to achieve partisan gains should not come as a surprise to many observers. The mid-decade precincting spearheaded by the Manatee County Supervisor of Elections appears to be such a case. There is good reason to suspect that the redrawing of precinct lines and the reduction in the number of Election Day polling stations in the counties was not done randomly or without consideration of potential electoral consequences. At the time, activists voiced concerns about SOE Bennett’s proposed changes to precinct boundaries and polling station locations, asserting that poor and minority voters would be especially affected. “I think the people most adversely affected by the changes were not taken into consideration,” Susie Copeland, the President of the Manatee County chapter of the NAACP, commented, as “[the] more affluent community was left alone, and as far as their polling place, they didn’t suffer same kind of closings as poorer neighborhoods” (Kennedy 2014). “Most of the people I’m worried about do not have bus service,” the Chairwoman of the county’s Democratic Party stated, asking, “Who’s going to get these people there?” (Kennedy 2014).

How well might our conclusions from a single county in Florida generalize to other contexts? It is important note that our results differ considerably from the

dominant account of the reprecincting process. As technically precise and convincing are the studies by Haspel and Knotts (2005) and Brady and McNulty (2011), we remain dubious that Atlanta's new precincts drawn in 2000 and the temporary 2003 precinct consolidation in Los Angeles County a decade ago are representative of how reprecincting is conducted in the rest of the country. Indeed, in California in 2003 Secretary of State Kevin Shelly voiced concern that the consolidation of Los Angeles County polling stations "openly encouraged voters to use the absentee ballot amid worries that polling places would be overcrowded," and he raised the alarm for "potential for long lines at the polls" on Election Day (Barreto et al. 2006: p. 225). At a minimum, then, our examination of the redrawing of precinct lines and the relocation of polling places in Manatee County, Florida, should encourage election observers to be more circumspect in an era of partisan polarization, as administrative changes may be intentionally designed with partisan or turnout effects in mind.

Ironically, as we noted earlier, as registered voters become more habituated to the many available modes of convenience voting, it becomes easier for local election administrators to justify reducing Election Day polling places or reconfiguring precinct lines. The alteration of Election Day polling places in Manatee County was not random: minorities, Democrats, and younger registered voters were disproportionately more likely to be reassigned to a new polling place in 2014 than other registered voters. Even after controlling for distance to the polls and early voting sites, we find those voters who faced increased transportation and searching costs in the 2014 General Election because their polling location was moved had lower turnout on Election Day, which was not fully counteracted by early in-person or absentee voting. The differential impact on voter turnout from Manatee County's decision to move precinct lines and alter polling places was neither random nor insignificant.

Unlike legislative redistricting battles, which receive considerable attention by the press, activist groups, and scholars, the redrawing of precinct boundaries and the reassignment of polling stations often falls below the radar. In addition to being difficult to detect, these decisions are often couched in nonpartisan, technical, or cost-savings language. Indeed, in Atlanta and Los Angeles the reprecincting and selection of polling places was ostensibly conducted randomly. But what if they are not? As Brady and McNulty (2011: p. 128) caution, if polling places are not assigned randomly, turnout effects "are large enough that they could be used by an unscrupulous politician or registrar to manipulate an election." As we show, the nonrandom precinct changes in Manatee County had substantial consequences on turnout across racial and ethnic, partisan, and age groups. Even if other modes of convenience voting are made available, as was the case in Florida in 2014, nonrandom reprecincting can have significant consequences on turnout, as an increase in transport or search costs due to consolidation might not be equally spread across the eligible electorate.

The fact that we find more than a minor effect of altering Election Day polling stations on turnout is perhaps surprising, considering the mixed effects that scholars attribute to various convenience voting reforms. Given how much press convenience voting reforms have generated, attention to changes in precinct boundaries

has been minimal. That we find that alterations to Election Day polling stations do not appear to be random—falling disproportionately on racial and ethnic minorities as well as younger voters and those registered to vote with the Democratic Party—should be cause for some concern not only for election officials but also the general public. Not only can seemingly benign changes to precinct boundaries and polling place locations marginalize voters who habitually depend on traditional Election Day voting, it can affect their propensity to vote at all in a subsequent election. As with legislative gerrymandering, the redrawing of precincts can be done with the aim of advantaging or disadvantaging the turnout of certain populations. But even local election administrators who have the purest of intentions should be wary about altering precinct boundaries or polling station locations, as such changes might unintentionally disrupt the electoral process. That the process of drawing precinct lines that are constitutive parts of legislative districts has received so little scrutiny by political activists and scholars is surprising, as locating registered voters into these geographic units can have significant ramifications for political participation and partisan outcomes.

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