

## Who Votes When—and Why? Electoral Context, Mode of Voting, and Turnout<sup>1</sup>

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### Abstract

In this paper, we consider *why* individuals choose one mode of voting over another. In particular, we examine whether individuals habituate toward one method of voting over time, or whether such decisions are dependent on the electoral context and induced by the behaviors of parties and campaigns. We find only very modest evidence to support the hypothesis that voters habituate to when and where they cast their ballots. Indeed, the probability of choosing the same method as in previous cycles rarely exceeds 50%. We then show that campaign spending devoted to mobilization can explain why individuals do not habituate. For example, we find that more campaign spending increases the likelihood of voting-by-mail by 5 to 10 percentage points—regardless of the mode of voting in the previous one or two cycles. These preliminary findings suggest an important role for candidates and parties in shaping the decision of when and where to vote.

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Americans are afforded a wide range of options for when, where, and how they cast their ballots, including in-person on Election Day at neighborhood polling places, in-person before Election Day at designated early voting locations (with locations ranging from churches, schools, supermarkets, to car dealerships), or by dropping a ballot in the mail. Many of these reforms were adopted to increase voter turnout by reducing the inconveniences and costs associated with voting. Scholars have studied how these alternative modes of voting impact the likelihood a person will vote, reporting mixed, but consistently modest, effects on turnout (see Burden et al 2014; Stein and Vonnahme 2010). What has not been studied is *why* a person chooses one mode of voting over another.

In this paper we ask why voters choose one mode of voting over another when given choices on when, where and how to cast their ballot? Our primary contribution is to assess the common assumption that voters adopt one or another mode of voting and then habituate to the use of that mode over time. A second contribution is to examine whether the campaign mobilization activities of candidates, parties and interest groups are associated with how and when voters cast their ballots. Documenting whether political campaigns have an influence on why citizens choose one mode over another may help to explain why these alternative modes of voting have had only inconsistent and modest—or even negative—effects on levels of voter turnout (Richey 2008; Larocca and Klemanski 2011; Burden et al 2014).

We test our hypotheses using individuals' voting histories from the 2010, 2012, 2014 and 2016 elections in Florida and North Carolina merged with congressional campaign spending data from the Federal Election Commission. We report two primary findings. First, we find that habituation to one mode of voting over time is not commonly observed. This evidence suggests that the dominant view of voting as habitual—including individuals' choices of which mode to use—and the assumption that the use of new (alternative) modes of voting will necessarily increase in usage over time are exaggerations at best, if not simply incorrect. Second, we find that the behavior of candidates and campaigns—measured here through campaign spending in

the seven weeks prior to the election—mediates habituation. That is, campaign spending can drive individuals to vote in ways that they did not in the previous one or two election cycles.

Our confidence in these findings is enhanced by our particular approach to using voter history files to study voter turnout. The use of voter history files to study voter turnout has increased dramatically over the past ten years, and is now considered to be the “best practice” in studying voter turnout. Yet these analyses are often restricted to one state (due to the ease and access to the state voter files), and, more importantly, rely on voter files that are “as of” the date on which they are generated. As a result, analysts using these voter files that wish to document the behavior of voters in previous cycles will not be able to examine the behavior of the actual voting universe of the time of that election. Voters who have moved, or died, for example, but were active in years prior, will not be included in the data. We advance the use of voter files to study turnout by relying on voter files from more than one state over time, and using files that capture the voting behavior of registered citizens over several election cycles. This allows us to more accurately study the same voter over time as she casts (or does not cast) her ballot in different ways over multiple elections.

Given the paucity of research on why citizens choose to cast their ballot other than on Election Day, we turn to the literature on the turnout effects of these electoral reforms to obtain some theoretical leverage. We detail our campaign-based explanation for the choices voters make when given alternative options for how and when to cast their ballot and then present our research design, measures, data sources and hypotheses; our findings; and a discussion of the implications of this research for understanding voter turnout in U.S. elections.

### **Electoral Reforms and Voter Turnout**

Virtually all empirical research on alternative methods of voting has addressed whether these electoral reforms influence voter turnout.<sup>2</sup> Scholars studying electoral reforms typically

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<sup>2</sup> Throughout, we use the terms “method” and “mode” interchangeably.

focus on common state-level adoptions including no-excuse absentee voting, in-person early voting, vote by mail, and same/election day registration, although states adopt and implement these reforms in a wide variety of ways. Each of these methods varies by the number and type of locations at which voters cast their ballots as well as the number of days and times during the same ballots can be cast. Conceptually and empirically, this makes comparing empirical findings challenging.

One of the most common rationales for adopting these alternative modes of voting has been to reduce the costs and inconveniences of voting, with the ultimate goal (and expectation) that more persons would vote (Stein and Vonnahme 2012). Researchers have consistently reported a 3%-4% higher rate of voter turnout in states that afford their voters no-excuse absentee voting (Barreto et al 2006; Patterson and Calederia 1985; Barreto et al 2006; Karp and Banducci 2000; 2001; Kousser and Mullin 2007; Leighley and Nagler 2014; Oliver 1996). However, a more mixed and nuanced set of findings are reported for states with vote-by-mail (VBM) elections (i.e., Colorado, Oregon and Washington). Here researchers report significant positive turnout effects with the adoption of VBM elections (Southwell 2009; Southwell and Burchett 2000; Richey 2008; Gerber et al 2014; Larocca and Klemanski 2011), modest and insignificant turnout effects which fade after adoption (Gronke and Miller 2012; Berinsky et al. 2001; Larocca and Klemanski 2011) and negative turnout effects (for presidential elections; Arceneaux, Kousser and Mullin 2007; Elul et al 2018).<sup>3</sup>

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<sup>3</sup> Many of the current non-Election Day precinct modes of voting available to voters are the product of recent (circa 1990) legislative enactments. These adoptions and their accompanying novelty at the time of their adoption may have had an independent effect on their utilization by voters. The ‘newness’ of being able to vote before Election Day in-person or by mail have attracted many voters to these non-conventional modes of voting. With time the novelty of these new modes of voting (and/or its advantages) may have worn thin. Empirically this would suggest a surge in early and non-Election Day precinct voting was followed a return to pre-adoption rates of Election Day precinct voting. This trend may be further enhanced by the news coverage accompanying the adoption of new modes of voting. Giammo and Brox (2010) and Gronke and Miller (2012) report supporting evidence for the novelty effect of vote by mail elections. Both sets of researchers found that the incidence of vote by mail and its positive effect on voter turnout was initially significant and positive, declining to insignificance as soon as the third Presidential election after adoption of vote by mail or other modes of mail assisted voting.

Research on in-person early voting also provides more mixed and nuanced findings on turnout effects. The most common finding is that in-person early voting has a modest *positive* effect on turnout (Berinsky, Burns, and Traugott 2001; Gronke, Galanes-Rosenbaum, and Miller 2007; Karp and Banducci 2000, 2001; Kousser and Mullin 2007; Leighley and Nagler 2014; Neeley and Richardson 2001; Stein 1998; Stein and Garcia-Monet 1997; Gimbel and Schuknecht 2003). Others have reported a significant and *negative* effect for in-person early voting on turnout (Richey 2008; Stein and Vonnahme 2010; Larocca and Klemanski 2011; Burden et al 2013). Larocca and Klemanski (2011) suggest that early voting's negative effect on turnout

“... may be an unintended consequence of the diffusion across a longer voting period of mobilization efforts and media attention that are traditionally concentrated in the days leading up to the election. The law of unintended consequences seems to have rendered early in-person voting counterproductive to the goal for which it is often adopted: increased voter turnout.” (2011:96)

In addition to the assumption that lowering the costs of voting would lead to higher turnout, both reformers and scholars alike have assumed that lowering the costs of voting might also reduce the gap in turnout levels across various demographic groups. That is, if some groups are disproportionately affected by the costs of voting and therefore vote at lower rates, then lowering the costs of voting should increase the turnout levels of these under-represented citizens. Here again, research findings are mixed. Several studies find that in-person early voting increases turnout among historically under-represented populations, including younger voters and non-whites voters (Stein 1998; Hanmer and Traugott 2004; Southwell and Burchett 2000; Berinsky 2005). Conversely, others (Stein 1996; Berinsky et al 2001; Berinsky 2005) suggest that convenience voting is more widely used by habitual voters, i.e., those who are older, white and better educated.

Berinsky (2005) concludes that the adoption of these electoral reforms have little systematic effect on overall turnout levels, or the turnout gaps across various demographic groups, as they simply make it easier for those who already vote to cast their ballots:

“Across both aggregate and individual-level data sets, using both panel and cross-sectional designs, and employing exit polls, validated vote records, and telephone surveys, the results are consistent. Individuals who utilize easy voting procedures tend to be more politically engaged and interested than those who do not take advantage of the opportunity (in the case of VBM, early voting, and absentee voting). Moreover, individuals who make use of less restrictive voting procedures are better educated (in the case of VBM and absentee voting) and have higher incomes (for all reforms). Thus, voting reforms do not correct the biases inherent in the electorate, and in some cases, reforms may even worsen these biases.” (Berinsky 2005:482)

But why is it that older, younger, and infrequent voters might be more likely adopt convenience voting as a means of reducing their costs, when historically under-represented citizens do not? Burden, et al speculate that the social and mediated aspects of the election environment may account for the minimal or non-existent effects of convenience voting reforms on the turnout gap across demographic groups:

“By offering more days on which to vote, early voting may lower the costs of voting for those who already plan to vote, but does not help others who are on the “turnout bubble, neither highly likely to vote nor to abstain . . . Rather than building up to a frenzied Election Day in which media coverage and interpersonal conversations revolve around politics, early voting makes voting a more private and less intense process.” (2014:98).

We believe that an alternative explanation as to why electoral reforms are used more by those who already vote is because candidates and their campaigns are more likely to target likely or habitual voters for early voting than they are to target less experienced, less likely voters. Our argument is consistent with Patterson and Caldeira's (1985) description of the 1978 California mid-term election:

In the weeks before the 1982 gubernatorial election, both the Democratic and Republican parties sought to stimulate absentee voting to the advantage of their own candidates. But it was the Republicans who most effectively fostered and marshalled their absentee supporters. The GOP sent an application for an absentee ballot, filled out by computer and requiring only the voter's signature, and a Republican "slate card" listing candidates for major offices, to 2.4 million Republican households in the state (Quinn, 1983, pp. 148-49). The response exceeded expectations, and, it turned out, made all the difference in the result of the election (1985: 767).

In other words, political parties and candidates focus more on mobilizing likely voters than nonvoters, and this principle also guides their mobilization efforts related to the use of alternative voting methods.

### **Explaining Why Individuals Vote Which Way**

The availability of a voting mode is necessary, but not sufficient, for any given individual to select that mode, regardless of the particular proclivities of that individual. We examine two distinct arguments regarding the use of alternative methods of voting: habituation and campaign

mobilization. We argue that, whether individuals' decisions to vote early or to vote on Election Day are habitual, the strategic decisions made by campaign organizations to mobilize turnout are the more dominant factors accounting for who decides to vote in different ways. We discuss each of these important factors in order.

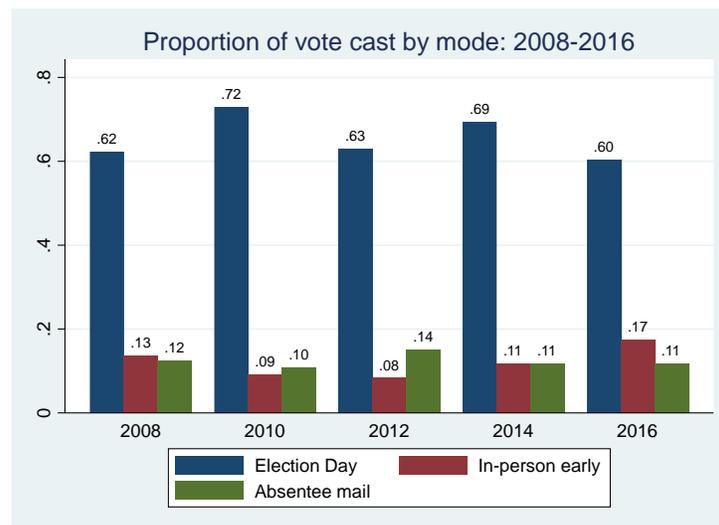
**Habituation.** We begin by conceptualizing individuals' decisions about whether and how to vote as being habitual in nature. This borrows from Plutzer's (2002) habituation theory of voting, which focuses on how individuals make a transition from a non-voting habit (the initial condition) to a voting habit. Other scholars have offered additional support for the idea that voting is a "routine" behavior (e.g., Brody and Sniderman 1977; Green and Shachar 2000; Green, Gerber, and Shachar 2003; Franklin 2004).

We adapt this model by integrating the mode of voting into the turnout decision, with the resulting outcome behavior being: don't vote, vote-by-mail, vote in-person early or vote on Election Day. Conceptualizing voting as a habit predicts that the more a behavior is repeated, the more it will be repeated. When thinking about voting modes, this would assume that once individuals begin voting early, they will continue voting early in subsequent elections. And the longer that a mode is available, the more that usage will be adopted.

However, it is important to note that habits are most consistently established in routine and well-defined contexts. This raises the possibility that voting one way (or not at all) in one type of election may not necessarily be reflected by voting in the same way in other types of election contexts. This is consistent with Coppock and Green's (2016) finding that the downstream consequences of voting are more likely to persist in "similar elections." For example, voting in a primary election is more likely to predict voting in the next primary election than it is to predict voting in other kinds of elections. We extend Coppock and Green's (2016) argument, and suggest that individuals might adopt different modes of voting in distinctive election contexts.

Coppock and Green’s argument is also consistent with reported shares of vote cast by different modes over the last five federal elections. As shown in Figure 1, the mean proportion of vote cast in U.S. counties by three modes of voting –in-person Election Day at a precinct polling place, in-person before Election Day and absentee by mail. However, there is also evidence that there is some aggregate vacillation in how voters choose to cast their ballots, especially between presidential and midterm congressional elections. In higher turnout presidential elections, there is a 10 percent increase in the average proportion of vote cast on Election Day over midterm congressional elections. In lower turnout midterm elections, a slightly higher proportion of voters cast their ballots either absentee by mail or in-person before Election Day.

Figure 1. Proportion of Vote Cast by Mode, 2008-2016



Source: U.S. Election Assistance Commission, 2008-2016 *Survey of Election Administration and Voting (EAVS)*.

**Campaign Strategy.** If the state builds an election reform, will individuals come to use it? We believe that one reason that extant studies report relatively modest—and sometimes conflicting—effects of electoral reforms may reflect a basic misspecification in the outcome of interest, in that these models never explicitly consider how these electoral reforms are

implemented or used. These models thus ignore whether an effective means and agent for implementing the reforms is present. Those who administer and conduct elections, county level election administrators, have limited resources, and for many increasing voter turnout (e.g., by engaging in voter information campaigns about early voting) is not a primary goal.

The more likely agents for converting pre-election-day voting opportunities into an increase in the number of ballots that are cast are political parties and their contesting candidates. Political parties and candidates have an incentive to employ pre-Election Day voting as part of their electoral campaigns if these actions enhance their chances of winning the election.

There is both anecdotal and empirical evidence that early voting, for example, has significantly changed the way candidates and parties conduct their campaigns. One Republican pollster aptly described the effect: “You need to divide the electorate into two groups. Run one campaign at early voters and another at Election Day voters” (Nordlinger 2003). Supportive of this assessment is the rise in the number of votes cast before Election Day (McDonald 2008b).

Common to all campaigns are efforts to bring voters to the polls on Election Day. These get out the vote (GOTV) activities are expensive in terms of both labor and capital. Before the adoption of pre-Election Day voting, GOTV activities were concentrated on the weekend before Election Day. Every day of early voting, however, is an occasion for GOTV activities, significantly increasing campaign costs. One Democratic consultant estimated that early voting has increased the cost of campaigns by 25 percent (Nordlinger 2003).

In-person early voting presents candidates and their surrogates with a serious budgetary challenge. Strained for resources, competing candidates may not be able to maintain GOTV efforts for multiple days. The choices candidates face in early voting states are to either raise more money to engage in multiple days of GOTV or curtail their GOTV efforts. The latter may take the form of contacting and mobilizing fewer voters over the course of the early voting period. The alternative strategy is to raise more money to accommodate the demands that early

voting places on GOTV efforts. Research that shows early voting depresses voter turnout suggests that candidates do not increase GOTV spending when facing early voting, spreading out the same level of effort across a longer period. This dilution of GOTV efforts around Election Day might depress the number of voters mobilized through their get out the vote efforts, but also may account for what types of voters use in-person early voting.

Other modes of voting, including mail assisted voting may not be susceptible to the budget constraints posed by in-person early voting, possibly accounting for their positive, albeit modest and variable effect on turnout. The GOTV demands on campaign budgets are modest in states where absentee mail-in voting is restricted to a small targeted population (i.e., persons over the age of 65, those out of the jurisdiction on Election Day or ill and/or disabled).

In states with permanent vote by mail or vote-by-mail, the mobilization efforts are shared with the local election administrator who is responsible for mailing ballots to all voters, including those unaware of an upcoming election. The requirements of mail-in voting are such that voters must initiate the request for a mail-in ballot. Campaign activities oriented to mobilizing mail-in voting are focused on mailing voters information about how to obtain mail-in ballots. In this instance, vote-by-mail elections enhance voter mobilization.

In contrast, locating and bringing supporters to the polls before Election Day places significantly different demands on campaigns than mobilizing voters to mail in their ballots. Efforts to mobilize voters through early voting are thus likely to be positively related to efforts of candidates and their campaigns, increasing the share of vote cast in-person before Election Day.

The incentives for candidates and parties to employ early voting as part of their GOTV efforts varies with the electoral setting i.e., presidential and midterm congressional elections. In midterm congressional elections, candidates face a significant decline in voter turnout over preceding presidential year elections. Between 15% and 25% fewer voters in a Presidential election show up for mid-term congressional elections (Pew Charitable Trusts 2014). The mobilization activities of presidential candidates and the nationalization of election issues propel

voter interest and turnout in presidential elections driving upward congressional voting in these elections. Congressional candidates must rely on their own efforts to turnout their supporters in mid-term elections. Absent national candidates, regional and district specific issues and candidates are main fare for motivating voter turnout. The drop off in voter turnout in midterm congressional elections can be problematic for the election (or re-election) of congressional candidates.

Midterm congressional candidates have a myriad of ways to minimize the drop-off in turnout among their core supporters between presidential and midterm elections. Among these strategies is the use of non-Election Day modes of voting. Congressional candidates are expected to encourage their core supporters to avail themselves of more convenient early voting opportunities in order to minimize the decline in turnout in midterm elections. Congressional campaign spending in midterm elections is expected to be focused on turning out Presidential election year voters through more convenient in-person early voting. We do not expect, however, congressional campaign spending in the Presidential elections to effect incidence of in-person early voting, or any other mode of voting. Here the efforts of presidential candidates and their parties are sufficient to drive voters to the polls and to vote for congressional candidates.

### **Data and Research Design**

Most studies of convenience voting in the U.S. leverage either cross-sectional survey data containing self-reports of both turnout and mode of voting, or voter files generated around one particular election cycle within one state or even county (Menger and Stein 2014; Smith and ???). While valuable, neither of these two kinds of data are appropriate for our research question—whether decisions over mode of voting are habitual, or made routine, over time, and whether habituation is mediated by the behavior of candidates, campaigns, and party

organizations—because neither approach allows for the study of the *same* set of registered voters over *multiple* election cycles.<sup>4</sup>

To this end, we purchased historical voter files, with data on voting history appended to each, from Florida and North Carolina for four consecutive federal election cycles—2010, 2012, and 2014, and 2016—from L2, a nonpartisan data firm specializing in bridging voter and consumer data. While L2’s work emphasizes the cleaning and combining of state administrative records, the firm also makes available to researchers the raw files received from each state. Critically, L2’s historical voter files are “election snapshot” files, collected right before (except in 2010) and right after each of the four elections. Table 1 presents the dates that each file was collected by L2 for each state.

Table 1. L2 Voter File Collection Dates by Cycle—North Carolina

	Pre-Election	Post-Election
2010	NA	4/16/11
2012	9/3/12	1/5/13
2014	9/6/14	5/9/15
2016	8/6/16	1/3/17

Table 2. L2 Voter File Collection Dates by Cycle—Florida

	Pre-Election	Post-Election
2010	NA	10/3/11
2012	10/12/12	2/25/13
2014	10/8/14	1/12/15
2016	9/14/16	1/17/17

What this means is that we are able to examine the behavior of all individuals registered at the time of each election. In contrast, a “contemporary” voter file—that is, the voter file that a

<sup>4</sup> Several researchers (Goel et al 2017; Berent, Krosnick and Lupia 2016; Nyhan, Skovron Titunik 2017) have found “viable methods of matching survey respondents to government records severely underestimate the proportion of Americans who were registered to vote. Matching errors that severely underestimate registration rates also drive down “validated” turnout estimates (Berent et al 2016:598)”

state elections office could generate today—will contain vote history data over time, but only for those voters who would be eligible to vote if an election were to be held today. It would not include voters who have died, moved out of state, or have become inactive at some point during our six-year time-series.

For example, such a file would not include an individual who voted in 2010 and 2012, before moving out-of-state in 2013. Likewise, it might not include a voter who participated in each of the four elections before passing away following the 2016 election. As a result, estimates of habituation could be biased if these individuals behaved differently in the past than those who have been part of the voting universe over the entire time-series. Our data approach minimizes this concern, and instead offers a complete picture of voting behavior over the last four election cycles.

Before proceeding, a note on state selection. We selected Florida and North Carolina in part because these two states' voter files are two of the most well-kept in the country, and as a result, are frequently studied by scholars of election administration. Additionally, L2 reported to us that Florida and North Carolina are two of their best states in terms of coverage—meaning that files are available dating back as close to 2008 (L2's first election cycle) as possible. More substantively, however, both states offer a myriad of ways to vote, and both have been consistent over time. In contrast to states like Colorado, which have undergone significant changes in the options available to voters over the last six years, both Florida and North Carolina have offered three key forms of voting over the entire time period: vote-by-mail, in-person early voting, and Election Day voting. Using these two states allows us to hold constant administrative changes within the state, and rule out the alternative hypothesis that a lack of habituation in decisions

over the mode voting are driven not by the behavior of voters or candidates and campaigns, but by a rapidly changing election law landscape.

We began by building a Florida-North Carolina voter file that includes one observation for each person registered to voter over our time-series; the dataset contains just over 23 million voters. We then created one variable for each of our four election cycles measuring the decision to vote and the decision over mode of voting. This variables can take on one of four values: (1) did not vote; (2) voted-by-mail; (3) voted in-person early; and (4) voted on Election Day. We note that our study is not a study of voters. Indeed, our measurement strategy allows voters to oscillate between voting and not voting across election cycles, ensuring that our results are not driven by cycle-to-cycle changes in the composition of the electorate. Additionally, using data provided by the historical voter files, we created cycle-specific variables for age, gender, race/ethnicity, and party registration.

A central claim in this paper is that the behavior of candidates, campaigns, and parties mediates the extent to which voters habituate toward one mode of voting or another over time. In particular, we claim that the mobilization activities of political elites—that is, the resources elites expend on increasing voter turnout—shape decisions about when to vote. Ideally, to test this expectation we would have individual-level data for each of our 23 million voters on whether they were contacted prior to the election by a campaign or party. In lieu of this, we instead offer a measure of “campaign exposure” at the county level.

To do so, we obtained data on congressional campaign spending (i.e., U.S. House and U.S. Senate) from the Federal Election Commission’s campaign finance reports for each election cycle. Campaign committees are required by law to provide an accounting of all expenditures, regardless of size. Critically, each reported expenditure also includes an explanation of the

purpose of the expenditure as well as the date of the expenditure. These two features of the data allow us to generate a measure of campaign spending devoted specifically to mobilization activities in the weeks immediately prior to the election. For each election cycle and congressional district, we calculate the logged sum of mobilization campaign spending in the seven weeks up to and including the week of the election.

We then apportioned congressional district campaign spending to each county wholly or partially contained within each district. Census block assignment files map Census blocks to both counties and congressional districts, allowing us to assign each U.S. House district to the counties that they represent.<sup>5</sup> We assume that campaigns apportion their campaign spending proportionally based on population in each county, and use the proportion of district population in each county to allocate congressional campaign spending by county. Thus, we obtain a county-level measure of all mobilization campaign spending in the seven weeks before Election Day, and merge these data our combined FL-NC voter file.

We estimate both the extent of habituation—and whether the likelihood of habituation is mediated by campaign efforts—for each election cycle-pair (i.e., 2010-2012, 2010-2014, 2012-2014, 2012-2016, 2014-2016) using multinomial logit. Multinomial logit is appropriate for unordered categorical data such as ours: as noted above, our key outcome and explanatory variables represent the four choices a voter could make in a given cycle. Multinomial logit also allows us to readily calculate the probability of choosing a particular method, conditional on their decision in a previous cycle (i.e., an analysis of habit) and on the level of campaign activity (i.e., an analysis of how spending mediates habit). We estimate the following equation:

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<sup>5</sup> We used David Jarmon's, Daily Kos Elections, published data that tracks changes in county/congressional district assignments across the 2012-2016 cycles. Found online on 2/9/18 at <https://docs.google.com/spreadsheets/d/1IJiPZV5alZwrfxjEcjWFqDm6SUGSMYya2RdobFX17jJE/edit#gid=0>

$$y_{it} = \beta_0 + \beta_1 X_{1it-w} + \lambda_{it} + \varepsilon_{it}$$

where  $y_{it}$  is the four-category vote decision for voter  $i$  in cycle  $t$ ,  $X_{1it}$  is the four-category vote decision for voter  $i$  in some previous cycle  $t - w$  (where  $w$  is equal to two or four depending on the election pair being analyzed), and  $\lambda_{it}$  is a vector of covariates for voter  $i$  taken at time  $t$ : age, gender (1 = female, 0 = otherwise), race/ethnicity (1 = non-Hispanic white, 0 = otherwise), party registration (1 = Democrat, 0 = otherwise), county-level logged mobilization spending, and state (1 = Florida, 0 = North Carolina).

### **Results: Do Voters Habituate to One Mode of Voting?**

We begin by addressing whether voters in Florida and North Carolina habituate toward one method of voting or another over time. We performed five analyses as outlined above—one for each election pair—and then calculated the predicted probability of choosing a particular method at time  $t$  given the method chosen at time  $t - w$ , holding all other covariates at their mean. We present the five analyses separately by “consecutive” and “like” elections.

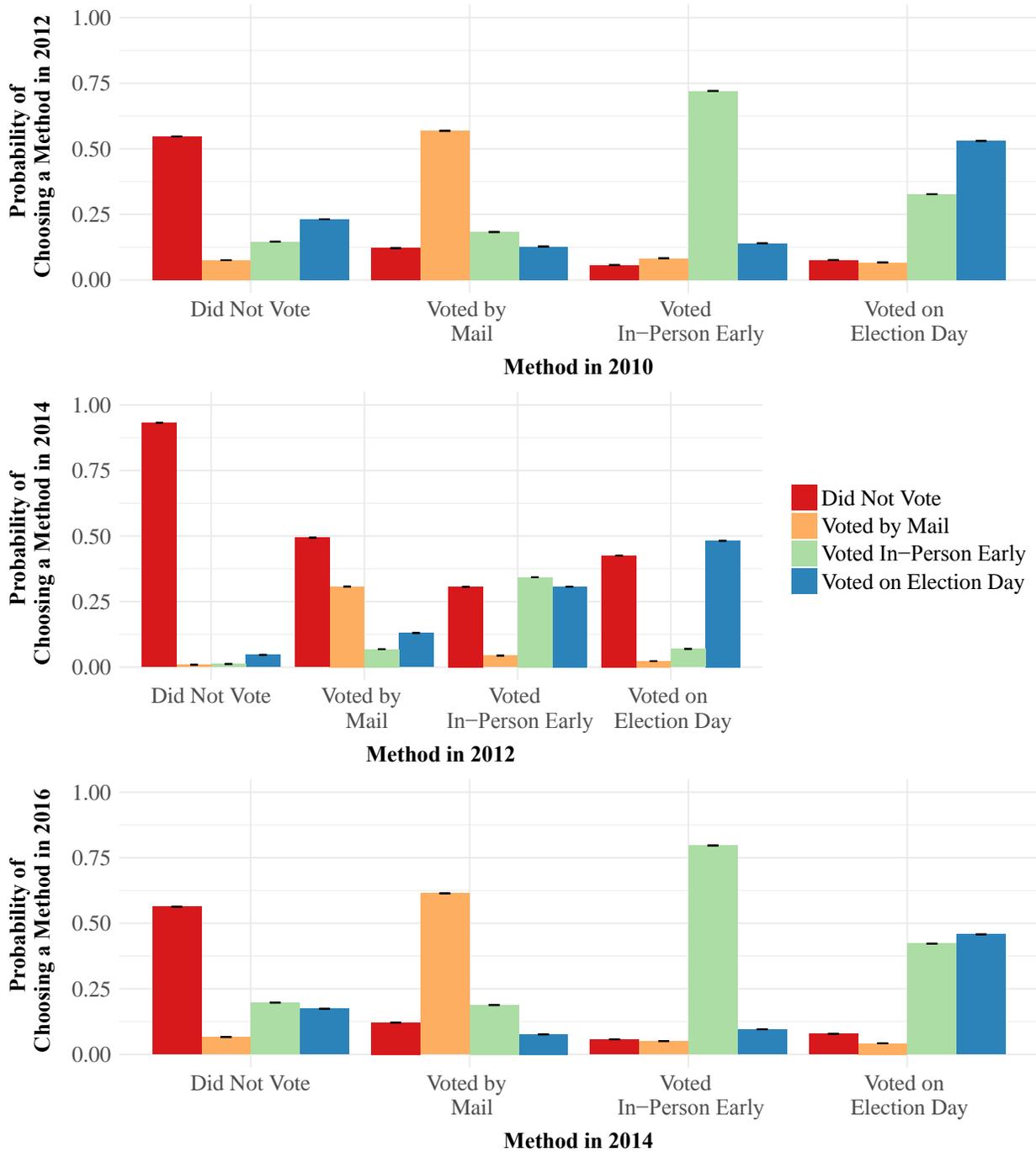
Consecutive elections are those elections that are back-to-back: 2010-2012, 2012-2014, and 2014-2016. Notably, because of the American election calendar, these elections are also contextually quite distinct: e.g., an analysis of how 2010 decisions shape 2012 decisions reflects on how behavior in a low-turnout midterm election drives behavior in a high-turnout, high-salience presidential election. “Like” elections, in contrast, are those that are contextually similar: 2010-2014 and 2012-2016.

Figure 2 presents our analyses of consecutive elections. Overall, we find only weak evidence of habituation in consecutive elections. For example, consider the relationship between behavior in 2010 and behavior in 2012. Individuals who voted on Election Day in 2010 are only 51% likely to vote on Election Day again in 2012. These voters are close to 35% likely to switch

to in-person early voting in 2012. Likewise, those who voted-by-mail in 2010 are just over 50% likely to do the same in 2012. We find similar effects in looking at 2014-2016, a comparison similar in context to 2010-2012 (i.e., examining how midterm behavior affects presidential-year behavior). In both cases, we find the strongest habituation among in-person early voters. In both comparisons, those who vote early in midterm elections are about 75% likely to vote in-person early again. In examining habituation from a high-turnout to low-turnout context, we find the opposite: those seemingly most likely to repeat the same action—among voters in 2012, that is—are Election Day voters. Yet, even still, these Election Day voters are still less than 50% likely to vote on Election Day.

In-person early voters in 2012 are less than 40% likely to vote in-person early in 2014. In fact, we find that it is largely a coin-flip as to whether these voters vote on Election Day, vote in-person early, or simply do not vote at all in 2014. In short, voters clearly oscillate between modes of voting across election cycles—even in consecutive election cycles that follow one another. These effects appear to depend on whether one is moving from a high-turnout to a low-turnout context, too. Election Day voters from a low-turnout context (e.g., 2010 and 2014) appear most likely to switch to in-person early voting in the subsequent high-turnout context. In contrast, it is in-person early voters from a high-turnout context (e.g., 2012) who are most likely to switch to Election Day voting in the subsequent low-turnout context. These changes may reflect a cost-benefit analysis of the ease of voting across certain contexts (i.e., Election Day lines will be longer in the high-turnout presidential election), or the behavior of candidates and campaigns. We explore these possibilities later in the paper.

Figure 2. Habituation in Consecutive Elections, FL-NC from 2010-2016

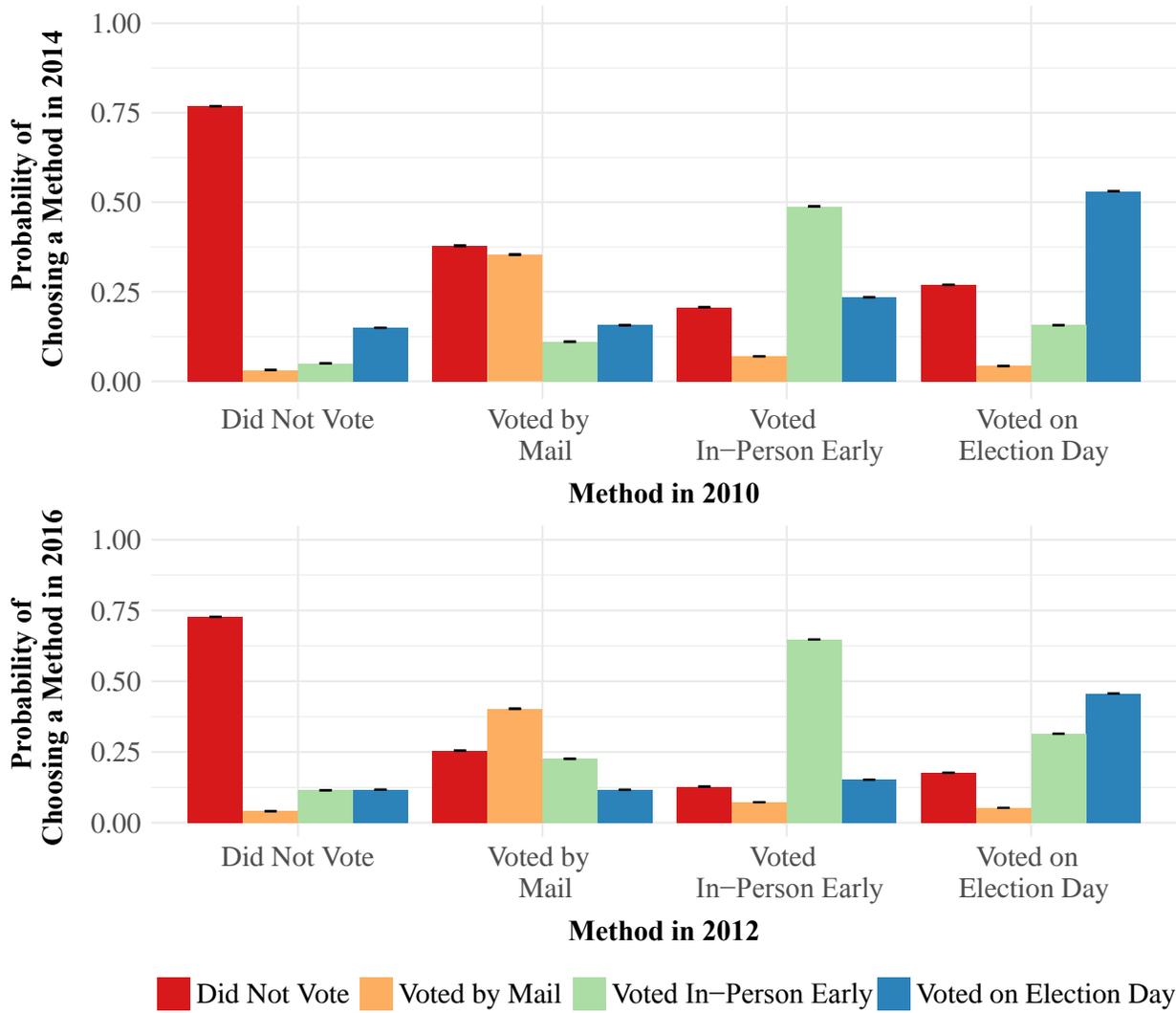


Next, we consider whether this lack of habituation may be driven, as suggested by Coppock and Green (2016), by the lack of similarity in the electoral contexts in consecutive elections. Perhaps voters are more likely to habituate toward one mode of voting over another when the political environments—in terms of the salience of the candidates, issues, and offices on the ballot, as well as the likelihood that particular methods of voting are comparably convenient (e.g., in-person early voting may seem more attractive in presidential elections when the lines on Election Day are expected to be longer, on average).

Figure 3 examines habituation, using the same method as before, using “like” elections: 2010-2014 and 2012-2016. And, again, we find no strong evidence of habituation. For example, in the midterm election pair—2010 and 2014—both in-person early voters and Election Day voters in 2010 are just under 50% likely to vote the same way again in 2014. We find similar effects in the presidential pair, albeit with stronger habituation among in-person early voters. Of course, our conclusions here rest on interpreting the magnitude of the predicted probabilities. In most all cases, choosing the same mode as in the previous cycle is the typical outcome. That is, Election Day voters in 2012 are still most likely—among the four choices—to vote on Election Day in 2016. Yet, the actual likelihood of doing so appears quite weak.

In short, we conclude—using the most comprehensive panel dataset of voters assembled to date—that voters do not tend to habituate toward one mode of voting over time. Instead, voters appear willing to cycle through various modes of voting between cycles. Why? We examine one explanation by exploring whether the behavior of candidates, campaigns, and parties—measured here through campaign spending at the congressional level—predicts whether voters are likely to deviate from the voting method used in previous cycles.

Figure 3. Habituation in “Like” Elections, FL-NC from 2010-2016



### **Does Campaign Activity Mediate Habituation?**

We argue that individuals' decisions on when/where/how to vote are dependent, in part, on the extent to which candidates and campaigns seek to mobilize voting by each mode. To test this argument, we proceed in three steps to explore how campaigns might mediate the choice of voting method. First, we estimate the same model as before, using multinomial logit, where the outcome is our four-category mode variable taken at time  $t$ , and where our key explanatory variables include the choice made at time  $t - w$  and logged county campaign mobilization spending at time  $t$ . We then calculate the predicted probabilities of choosing each method at time  $t$  conditional on both the method chosen at time  $t - w$  and the level of logged campaign mobilization spending at time  $t$ . We do this calculation using each one-unit value between and including the minimum and maximum level of campaign spending.

Next, within each method of voting at time  $t - w$ , we subtract the probability of choosing each method at time  $t$  at the minimum value of campaign spending from the probability of choosing that same method at time  $t$  at the maximum value of campaign spending. This provides us the difference in predicted probabilities—within each method of voting at time  $t - w$ —of choosing a particular method of voting at time  $t$  as spending goes from the minimum value to the maximum value. Using the standard errors associated with each predicted probability, we are also able to calculate a 95% confidence interval, which gives us an estimate of whether the difference in probabilities at the minimum and maximum value of spending are distinguishable from one another.

As in the analysis above, these estimates are produced for both consecutive and “like” election pairs. Figure 4 plots these predicted probabilities for the three pairs of consecutive elections. Looking first at the 2010-2012 pair—the top panel of Figure 4—we find evidence to

suggest that campaign spending has an effect on whether voters choose the same method of voting as before. Interestingly, here, we find that spending actually reinforces previous behavior. It makes 2010 Election Day voters more likely to vote on Election Day in 2012, and less likely to switch to voting in-person early in 2012. Substantively, moving from the minimum value of logged campaign spending to the maximum value of campaign spending increases the probability of voting on Election Day again by about 7 percentage points.

We find a similar effect, albeit smaller in size, among in-person early voters in 2010. The results from other pairs appear mixed, too. Campaign spending in 2012 appears to make in-person early voters slightly more likely to vote on Election Day in 2014. Likewise, Election Day voters in 2012 are less likely to vote on Election Day in 2014. Such a finding is consistent with our previous examination of habituation in that it suggests that campaign activity could be one mechanism through which in-person early voters in a high-turnout context move to a different form of low-turnout context in 2014.

Figure 4. Spending and Habituation in Consecutive Elections, FL-NC from 2010-2016

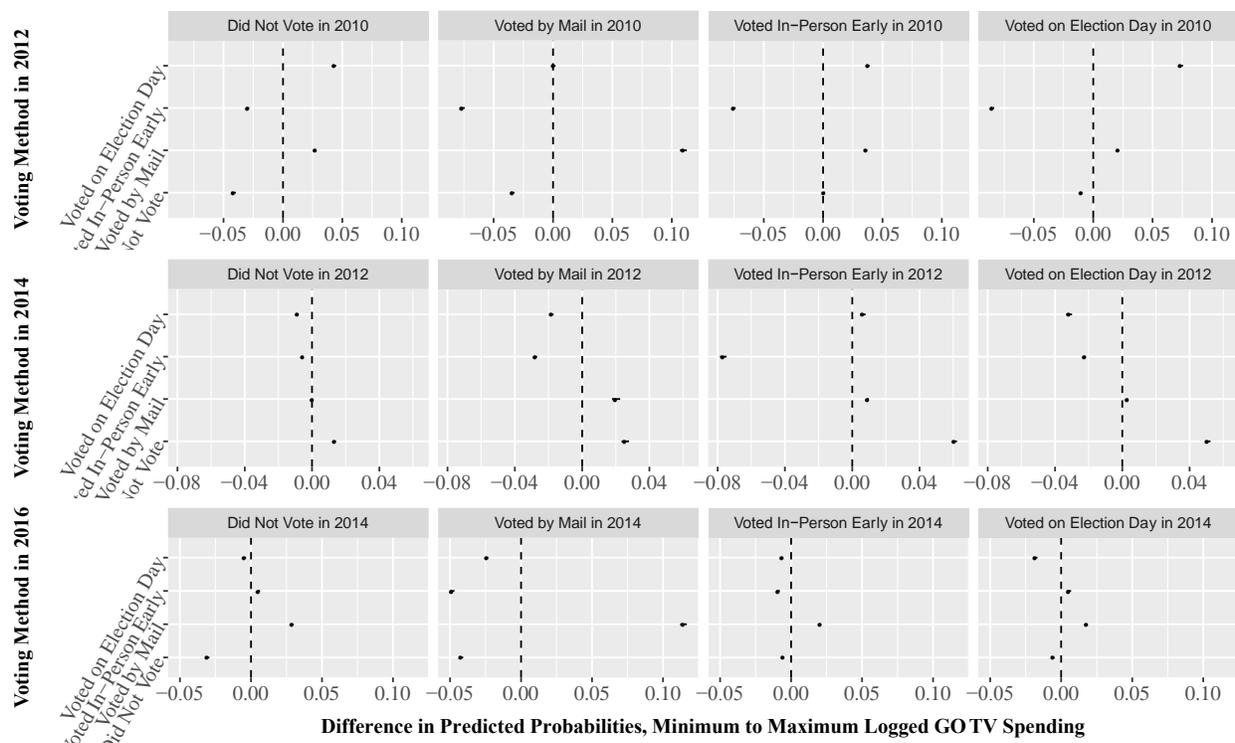


Figure 5 presents the same kind of analysis, but in “like” elections. Here, we find some inconsistent patterns across midterm and presidential pairs. In the midterm pair, it appears that campaign spending induces in-person early voters in 2010 to be more likely to vote on Election Day in 2014 by about 1 percentage point. The probability that these voters vote again in-person early drops dramatically. In the presidential pair, however, we find that campaign spending has negative effects on the likelihood of voting in-person early or on Election Day in 2016, regardless of whether you voted in-person early or on Election Day in 2012.

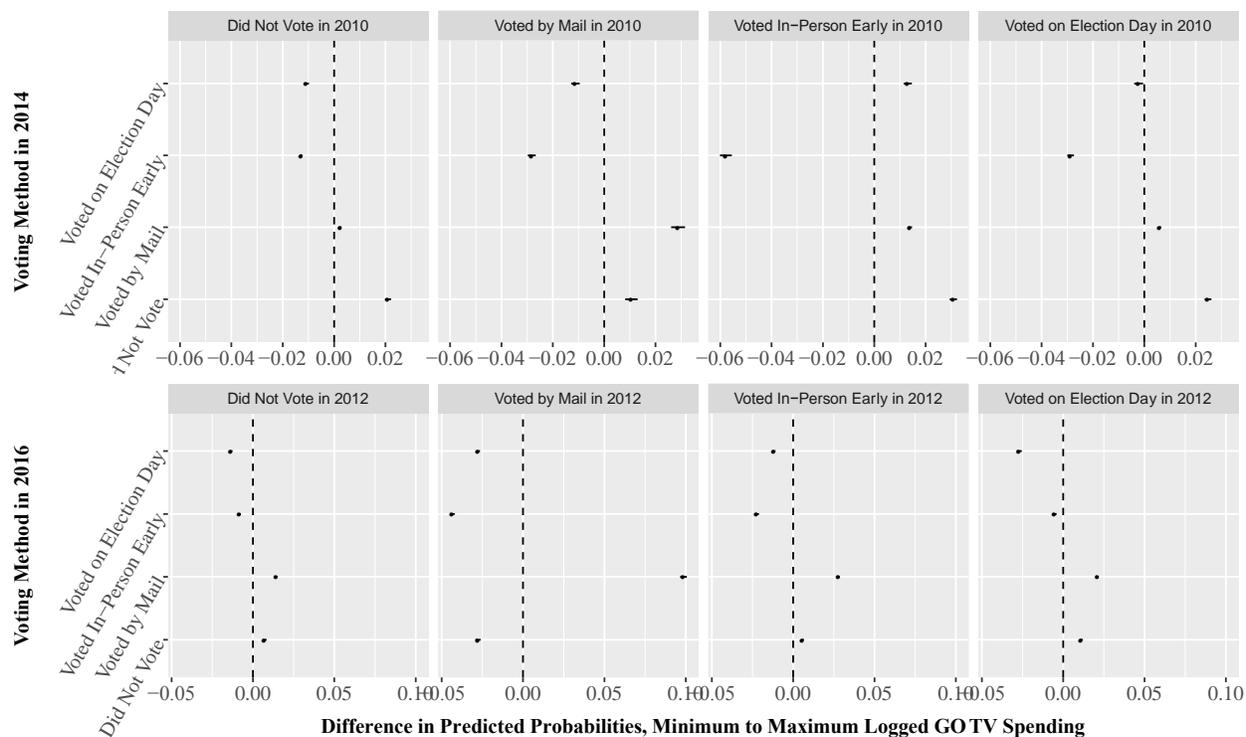
In contrast to these weak or mixed findings, we do find one consistent pattern across both consecutive and “like” elections: campaign spending—regardless of mode of voting at time  $t - w$ —increases the probability of absentee voting-by-mail. For example, Election Day voters and

in-person early voters in 2010 were between 3 and 4 percentage points more likely to vote-by-mail in 2012. These findings are largely robust to different contexts/other election pairs, including 2010-2014, 2012-2014, 2012-2016, and 2014-2016. Most striking is that effect of campaign spending on those who did not vote in the previous cycle. In each model but one (2012-2014), campaign spending had a positive and statistically significant effect on the probability that a previous non-voter votes absentee by mail in the subsequent cycle.

These findings highlight the power of elite activity, and indeed suggest that even the most “convenient” form of voting requires a nudge to perform. Moreover, it suggests that campaigns—in their quest to turn out as many voters as early as possible—successfully move voters who either do not vote or have previously used more costly methods of voting to more convenient modes. Method of voting is thus not a standing decision, unmoved by the context or the behavior of outside of actors, but instead a decision easily structured by the behavior of elite political actors.

What is more, we find that largest effect of campaign spending in the likelihood of absentee voting-by-mail among previous absentee vote-by-mail voters. Indeed, among these voters and in some cases—namely, 2010-2012, 2012-2016, and 2014-2016—the likelihood of voting-by-mail increases by 10 or more percentage points as campaign spending moves from the minimum to the maximum. These estimates are striking, and suggest an important role for candidates, campaigns, and parties: even those with experience using the most convenient and seamless method of voting—requiring no additional effort beyond completing and returning a ballot—need active candidates and campaigns in order to repeat the same action.

Figure 5. Spending and Habituation in “Like” Elections, FL-NC from 2010-2016



## Conclusion and Discussion

Efforts to increase voter turnout by adopting convenient and less costly methods for casting a ballot have met with mixed if not disappointing results. We have sought to identify why this might be true by asking whether the method with which a voter chooses to cast their ballot, before or on Election Day, by mail or in-person, including non-voting, is habitual and resistant to change. We find little evidence to support the habituation hypothesis. Voters' method of voting changes across elections and over relatively short time spans. We explain the variability in how and when voters cast their ballots as a function of campaign spending by Congressional candidates to mobilize their base. We find supporting evidence, albeit modest and somewhat mixed across contexts for this explanation.

For example, though we find that campaign spending increases the probability of voting-by-mail across all forms of previous methods of voting, we do find that these effects are only restricted to behavior in midterm elections, as hypothesized. Spending by congressional campaigns, however, does have a large and positive effect on absentee voting-by-mail. As campaign spending increases, Election Day voters and in-person early voters in 2010 were significantly more likely to vote-by-mail in 2012. These findings are largely robust to different other election pairs. Most striking is that effect of campaign spending on those who did not vote in the previous cycle. In each model but one (2012-2014), campaign spending had a positive and statistically significant effect on the probability that a previous non-voter votes absentee by mail in the subsequent cycle.

It is not surprising that campaigns have their greatest impact on shaping voter turnout through absentee voting-by-mail. This method of voting is the oldest and most widely practiced mode of convenience voting. First adopted for the Civil War election of 1864 (Beaton 1915; Previts 2009), some form of absentee voting by mail has been available in all 50 states since 1945. At present, 28 states have no-excuse absentee voting by mail. Moreover, absentee voting by mail affords candidates and their parties an efficient and effective means of enhancing voter participation. As Patterson and Caldeira (1987) report, California's adoption of no-excuse absentee voting by mail in 1974 was immediately capitalized upon by Republicans.

Yet, one can also imagine other ways of measuring the campaign. Our use of campaign spending as a measure of "campaign exposure" allows us to decipher "how much" effort the candidates and campaigns may have spent on mobilization in the weeks prior to the election. Our measure does not, however, take into account the differential nature of mobilization activities—reflected too in the level of election salience—across election cycles. Our use of only

congressional spending—necessitated by our inability to place presidential and party spending into particular districts or counties—means that campaign activity appears flat over the six-cycle time series because congressional candidates likely spend about the same regardless of whether it is a presidential year, or not. We know, however, that this is not the case: there is much more campaign spending in presidential cycles relative to midterm cycles. We intend to re-run the above analyses using data on campaign advertising. These data will allow us to create measures of campaign activity that include congressional, presidential, party, and PAC behavior, and will allow us to create measures that reflect the different levels of activity over time. We note, however, that using campaign ads may reflect less of the “ground game” and more of the information environment associated with each election. It will allow us to argue whether the information environment, and the saliency of a given context, is what can explain the variability in individual-level decisions over the mode of voting over time.

Finally, we note again that our paper is unique in its approach to the data and analyses. First and foremost, our use of statewide voter files allows us to examine the behavior of the entire electorate. More importantly, our use of “election snapshot” files allows us to examine the behavior of the entire voting universe at the time of the given election, meaning that we never lose one voter—except that registered in the few weeks between when L2 collected the data and the election—in our analyses. Our approach then is critical for a study of habituation, and gives us confidence that the findings we uncover reflect generalizable and real-world political behavior in Florida and North Carolina. More generally, we think scholars of voting behavior should adopt our approach, as it is the only way to generate a panel of the same voters over multiple cycles and examine the behavior of each.

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