

## The Effect of Prepaid Postage on Turnout: A Cautionary Tale for Election Administrators

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### ABSTRACT

In collaboration with local election officials, we conducted a randomized field experiment in which postage-paid envelopes were provided to a random sample of 10,000 permanent vote-by-mail (VBM) voters in San Mateo County, California, in advance of the November 2, 2010, general election. We find that the treatment generated statistically significant but unexpected effects: postage-paid envelopes increased the probability that voters cast their ballots in person and decreased the probability that they cast their ballots by mail. These offsetting effects meant that the intervention produced no net change in voter turnout. We find that this pattern of countervailing effects is strongest among voters who frequently voted by mail in the past, those potentially most susceptible to disruptions in routine. Post-election interviews support the idea that the postage-paid envelopes created confusion for some voters. The results suggest that reforms designed to increase turnout by decreasing voting costs may have the unintended effect of disrupting routines.

**F**OR DECADES, SCHOLARS HAVE CONJECTURED that voter turnout rates would rise if the costs of voting were reduced. Early research (Key 1949) considered tangible costs, such as poll taxes; later authors (Kelley, Ayres, and Bowen 1967; Rosenstone and Wolfinger 1978) focused primarily on transaction costs, such as the inconvenience of registering to vote well in advance of an election. Recent years have seen a revival of this line of research in the wake of policy innovations designed to make voting more convenient: Election Day registration (Brians and Grofman 2001; Demos 2006;

Knack 2001), early voting (Gronke, Galanes-Rosenbaum, and Miller 2007; Stein 1998; Stein and Garcia-Monet 1997), voting by mail (Qvortrup 2001; Southwell and Burchett 2000), regional polling stations (Dyck and Gimpel 2005; Haspel and Knotts 2005), Election Day voting centers (Stein and Vonnahme 2008), and ballots that are translated into languages other than English (Hopkins 2011). Scholars have also seized on research opportunities created when budget-conscious election administrators have changed voters' polling locations (McNulty, Dowling, and Ariotti 2009; Brady and McNulty 2011) or forced them to vote by mail (Southwell 2004; Kousser and Mullin 2007; Bergman and Yates 2011; Meredith and Malhotra 2011).

Although there is no doubt that poll taxes or extraordinary barriers to voter registration depress turnout (Merriam and Gosnell 1924), there is less scholarly consensus about the effects of making voting more convenient. Although the pioneering work of Rosenstone and Wolfinger (1978) and Powell (1986) implied that the policy innovations of the 1980s and 1990s would substantially increase

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voter turnout, subsequent evaluations have found these effects to be relatively small. For example, states that changed their registration requirements so that voters could register closer to (or on) Election Day saw relatively small gains in voter turnout (Knee and Green 2011), as did states that adopted early voting or no-fault absentee voting (Berinsky 2005; Gronke 2008). Costs matter, but there is a growing sense among those who study policy interventions that costs matter less than initially supposed.

This article contributes to the literature on transaction costs and turnout in two ways. The first is methodological. In contrast to previous research on voting costs, which has primarily relied on observational data, the research presented here is based on a randomized field experiment that varies the convenience of voting for some voters: a county registrar delivered ballots that could be mailed without postage to randomly-selected permanent absentee voters. The use of random assignment helps overcome one of the main impediments to causal inference—uncertainty about whether jurisdictions that introduce a policy innovation have the same expected potential outcomes as jurisdictions whose policy remains unchanged.<sup>1</sup>

The second contribution relates to the policy implications of our intervention. Our intervention was designed to increase voter turnout by lowering transaction costs, but any change in voting procedures inevitably imposes transaction costs on those who must adapt to the new system. Our experiment does not allow us to estimate each of these effects separately, but we are able to study behavioral outcomes that speak to the *net* change in transaction costs. Surprisingly, postage-paid envelopes increased the probability that voters cast their ballots in person and decreased the probability that they cast their ballots by mail. This pattern turns out to be most pronounced among subjects with the most experience with voting by mail in prior elections, which we interpret as evidence that the introduction of postage-free ballots created some confusion among voters, who subsequently cast their ballots in person to be sure their votes were recorded. In other words, those voters most accustomed to voting by mail experienced the greatest disruption in routine. This interpretation is supported by a series of open-ended interviews conducted several months after the election with local voters who were shown both standard mail-in ballots and postage-free mail-in ballots.

This article is structured as follows. We begin by describing the experimental design: the electoral context, the procedure used to assign permanent absentee voters to treatment and control groups, and the outcome measures used. We next describe the experimental intervention, which was designed and implemented by the county registrar. We then discuss the empirical results for the entire sample of 148,840 registered voters, followed by results broken down according to voters' prior experience with voting by mail. Prompted by the counterintuitive result that postage-free envelopes increased in-person voting, we describe a series of open-ended interviews designed to shed light on voters' perceptions of the old and new envelopes. We conclude by discussing the implications of this experiment for policy interventions designed to lower the transaction costs of voting.

## EXPERIMENTAL DESIGN

### *Setting*

The experiment was conducted in San Mateo County, California, during the November 2, 2010 general election. This election had competitive top-of-the-ballot contests, including the gubernatorial race between Republican Meg Whitman and Democrat Jerry Brown, as well as the Senate race between Democratic incumbent Barbara Boxer and Republican challenger Carly Fiorina. A number of high-profile ballot measures were also decided, including a proposal to legalize marijuana (Proposition 19) and a proposal to suspend California's global warming law until economic conditions improved (Proposition 23).

### *Subjects*

Our treatment group consisted of 10,000 permanent absentee voters (PAV) selected at random from the list of all 148,840 permanent absentee (vote-by-

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<sup>1</sup>This uncertainty is reduced but not altogether eliminated by recent studies of natural experiments, such as the imposition of arbitrary population cutoffs (Pettersson-Lidbom 2011) or jurisdictional boundaries (Keele 2011), because the research design leaves open the question of whether self-selection or other unobserved processes cause potential outcomes of treated and untreated voters to vary systematically. See Green et al. (2009) for an overview.

mail) voters in San Mateo County. Assignment of voters to the treatment was clustered by household. In other words, all voters registered at the same address received the same set of voting instructions.<sup>2</sup> PAV not assigned to receive the treatment comprised the control group. As shown in Table 1, the randomization produced the expected similarity on observable characteristics between the treatment and control groups. Differences between treatment and control conditions across a host of demographic and political variables—age, party registration, voting history—were substantively small and statistically insignificant despite the power to detect small differences in a sample of this size.

### Treatments

Treatment-group individuals were sent a postage-paid envelope with their absentee ballot. In addition, instead of receiving the usual insert of voting instructions, individuals in the treatment group were sent the insert that San Mateo County sends to voters assigned to mail-only precincts, for which the county always provides postage-paid envelopes. The front sides of the inserts sent to voters were identical between the treatment and control groups (see Figure 1). The instructions on the back of the inserts sent to the treatment group voters noted that postage was not required, as shown in Figure 2, while control group voters were provided standard instructions as shown in Figure 3. The prepaid envelopes and appropriate instruction sheets were inserted into the ballot mailings and were sent out in the same manner as the control-group

ballots. This aspect of the experiment was handled directly by staff at the San Mateo County Registrar's office and their vendor, with no direct involvement by the authors. All costs of the experiment, including the printing of the treatment envelopes and inserts, and postal fees, were then reimbursed to the county.<sup>3</sup>

### Outcome measures

After Election Day, we obtained an updated voter file from the San Mateo County Registrar of Voters, which provided validated turnout information for individuals in our treatment and control groups. San Mateo County records whether each voter cast a ballot by mail, in person on Election Day, or in person during the early voting period.<sup>4</sup> With this information, we determined whether subjects voted and, if so, how they cast their ballots.

## RESULTS

First, we consider the effect that the treatment had on turnout. We find that turnout was nearly the same in the treatment and control groups. In the treatment group, turnout was 75.0 percent, compared to 74.8 percent in the control group (see the first row of Table 2). The difference is not statistically significant ( $p=0.609$ , two-tailed).

However, the overall null effect on turnout is the combination of two equal and opposite effects of the treatment. As shown in the second row of Table 2, individuals in the treatment group who voted were

TABLE 1. SUMMARY STATISTICS AND BALANCE TESTS

	<i>Control Group</i>	<i>Treatment Group</i>	<i>p-value</i>
% voted June 2010	54.0	53.7	0.616
% voted November 2009	34.2	34.0	0.742
% November 2008	89.3	89.3	0.919
% voted June 2008	43.2	43.1	0.890
% voted February 2008	65.9	65.7	0.582
% Democrat	52.3	52.5	0.682
% Republican	23.3	22.7	0.171
Age (mean)	53.5	53.2	0.183
Times previous VBM voting in last five elections (mean)	2.68	2.66	0.307
N	138,840	10,000	

Note: *p*-values are two-sided and clustered by household.

<sup>2</sup>We clustered the treatment by household so that people in the same household were not exposed to different treatments. Accordingly, all standard errors reported below are clustered by household.

<sup>3</sup>In San Mateo County, the U.S. Postal Service is legally required to deliver unstamped or under-stamped ballots. In other words, even if an absentee voter with a regular envelope mails their ballot without postage, the U.S. Postal Service will deliver it. This loophole is the subject of the occasional pre-election news story. For example, KQED San Francisco Public Radio aired such a story on October 23, 2008 (KQED 2008). Nevertheless, warnings that returned vote-by-mail ballots that do not have postage affixed will not be delivered appear on the instructions for eleven of California's 58 counties. <sup>4</sup>Some voters may have returned their VBM ballots by hand, delivering them inside the sealed envelope to a polling place. These voters are noted as having voted by mail; the county has no method for distinguishing between VBM ballots that are hand delivered versus those that arrive via the U.S. Postal Service.

**Tuesday, November 2, 2010 is Election Day**

The polls will be open 7 a.m. - 8 p.m. Voted ballots must be received on or before Election Day by 8 p.m.

Sorry, by law, postmarks are not accepted!

Mail your voted ballot to the Elections Office by October 26 to assure timely postal delivery.

**4 EASY STEPS TO SUCCESSFULLY VOTE BY MAIL**

Phone: (650) 312-5222 San Mateo County Elections Office  
 Fax: (650) 312-5946 40 Tower Road,  
 San Mateo, CA 94402  
 California Proxy Service: 711 Email: [registrations@smco.org](mailto:registrations@smco.org)  
 Chinese/Spanish Assistance: (844) 742-8683 Website: [www.hopethefuture.org](http://www.hopethefuture.org)  
 Provider/Voter Assistance: (866) 830-8683

Warren Slocum  
 Chief Elections Officer, San Mateo County

SMAT's 81535 Rev 7/10 E-66M

FIG. 1. Front side, treatment and control inserts.

less likely to have done so using their absentee ballot (68.6 percent versus 70.2 percent,  $p=0.001$ ) but *more* likely to have done so at their polling place, either via regular ballot or provisional ballot (6.2 percent versus 4.8 percent,  $p<0.001$ ). Given the low baseline turnout rate of vote-by-mail (VBM) voters who choose to vote in person, this increase is large. VBM voters were 25% *more* likely to vote in person due to the treatment.

In order to integrate information about whether and how subjects voted, we estimate a multinomial logistic regression model where we specify three categories of turnout: abstained (baseline category), voted at polling place, and voted by mail. As shown in Table 3, there is a strong positive effect of the treatment on people voting at their polling place ( $p<0.001$ ) and a negative but insignificant effect on voting by mail. This alternative specification clearly indicates that the treatment effect that

emerges is an increase in the propensity to vote in person.

Although the treatment was intended to make voting by mail more convenient and less costly, the results indicate that targeted voters were actually less likely to use the provided (postage-paid) envelopes than were individuals in the control group, who were not provided free postage. We looked for hints about the underlying causes for this result by considering other variables in the voter file, as described below.

### EVIDENCE OF THE MECHANISM

Based on the results, we hypothesized that voters may have been unsettled by the change to their normal voting routine. First, the language in the insert used by the county may have been confusing. The

## 4 Easy Steps to Vote By Mail


### 1. Mark Your Ballot

1. Vote your ballot. Your ballot consists of two ballot cards.
2. Remove the ballot stub; this is your receipt.

**Be careful:**

- Do not sign or print your name anywhere on the ballot.
- Do not initial your ballot, even if you make a change.
- Do not make stray marks like doodles, comments, etc.
- **Any of these will invalidate your vote.**

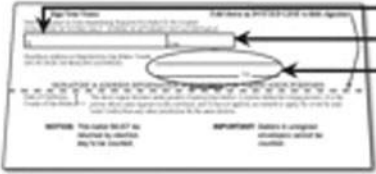
**If you make a mistake...** Fill in the box on the upper right hand corner on the outside flap of the envelope. Return the ballot to the Elections Office. We will mail you a new ballot. Or, exchange your ballot for a replacement ballot in person at our offices on or before Election Day or at your polling place on Election Day.



**Use a Black or Blue Pen.  
Do Not Use Pencil or Highlighter.**

### 2. Sign, Date and Address the Return Envelope

1. Fold your ballot and insert it into the return envelope.
2. Under the flap of the return envelope, sign your name in the signature box, print today's date and your San Mateo County residence address.
3. Fold the flap down on the DOTTED LINE to hide your signature.
4. Moisten both glue strips and fold flap down to secure your ballot.
5. Seal by pressing along both blue bars on the flap.



Sign your name.  
Print today's date.  
Print your San Mateo County residence address.

### 3. Return Your Ballot

- Mail your voted ballot by **October 26** in the **POSTAGE PAID RETURN ENVELOPE** provided, or
- Drop off your voted ballot during regular business hours at any city hall in San Mateo County, or
- Drop off your voted ballot at the Elections Offices (Monday-Friday, Oct. 4 through Nov. 2, 8 a.m. - 5 p.m. & Saturday, October 30, 10 a.m. - 3 p.m.)
  - Elections Office, 40 Tower Road, San Mateo
  - Office of the Clerk-Recorder, 555 County Center, 1st Floor, Redwood City
- Or drop off your voted ballot on Election Day from 7 a.m. - 8 p.m. at any polling place in the County of San Mateo.

### 4. Confirm Receipt of Your Voted Ballot

Go to [www.hapethefuture.org](http://www.hapethefuture.org) to track your ballot. Enter your:

House Number	Zip Code	Birth Date
↓	↓	↓
Check My Registration/Election Status (your account)	Check My Ballot	Check My Ballot

The Ballot Tracker replies with the date your ballot was mailed to you and the date your voted ballot was received at the Elections Office.

FIG. 2. Back side, treatment insert.

front of the insert noted that ballots must be received by Election Day and that “Sorry, by law, postmarks are not accepted” (Figure 1). Yet, the back of the insert invited voters to “Mail your voted ballot by October 26 in the POSTAGE PAID RETURN ENVELOPE provided,” or to drop off their ballot in person (Figure 2). Although the “postmarks are not accepted” line was designed by the San Mateo County Registrar’s office to clarify that ballots mailed on Election Day would not be counted, this language may have confused voters because it is also true that postage-paid envelopes are not postmarked. Voters who know that a postmark is the date stamp used to note when a piece of stamped mail has been processed by the U.S. Postal Service, and that postage-paid envelopes are not postmarked, might have wondered why the instructions referred to a postmark (aware that their postage-paid envelope would not be postmarked).

Second, voters who had consistently used their own stamps to mail in absentee ballots in past elections may have noticed the change in procedure and been thrown off by it. County staff reported after the election that a few voters had called their office with the concern that something was wrong and that they may have received the postage-paid envelope in error. Evidence from on-line chats regarding absentee voting also supports this proposition (Yelp 2011). Consistent with previous research on policy interventions that disrupt habitual behavior (Wood, Tam, and Witt 2005; Verplanken and Wood 2006; McNulty, Dowling and Ariotti 2009; Brady and McNulty 2011; Bergman and Yates 2011; Kousser and Mullin 2007; Meredith and Malhotra 2011), this disruption to the usual voting procedure may have caused some VBM voters to alter their previously habitual behavior and instead vote in person.

To provide evidence on whether this kind of change to routine could explain our results, we

## 4 Easy Steps to Vote By Mail

### 1. Mark Your Ballot


- Vote your ballot. Your ballot consists of two ballot cards.
- Remove the ballot stub; this is your receipt.

**Be careful:**

- Do not sign or print your name anywhere on the ballot.
- Do not initial your ballot, even if you make a change.
- Do not make stray marks like doodles, comments, etc.
- Any of these will invalidate your vote.**

**If you make a mistake...** Fill in the box on the upper right hand corner on the outside flap of the envelope. Return the ballot to the Elections Office. We will mail you a new ballot. Or, exchange your ballot for a replacement ballot in person at our offices on or before Election Day or at your polling place on Election Day.


**TO VOTE:**  
Fill in the box next to your choice



**Use a Black or Blue Pen.  
Do Not Use Pencil or Highlighter.**

### 2. Sign, Date and Address the Return Envelope

- Fold your ballot and insert it into the return envelope.
- Under the flap of the return envelope, sign your name in the signature box, print today's date and your San Mateo County residence address.
- Fold the flap down on the DOTTED LINE, to hide your signature.
- Moisten both glue strips and fold flap down to secure your ballot.
- Seal by pressing along both blue bars on the flap.



Sign your name.  
Print today's date.  
Print your San Mateo County residence address.


### 3. Return Your Ballot

- Use a 44 cent postage stamp to mail your voted ballot by **October 26** in the RETURN ENVELOPE provided, or
- Drop off your voted ballot during regular business hours at any city hall in San Mateo County, or
- Drop off your voted ballot at the Elections Offices (Monday-Friday, Oct. 4 through Nov. 2, 8 a.m. - 5 p.m. & Saturday, October 30, 10 a.m. - 3 p.m.)
  - Elections Office, 40 Tower Road, San Mateo
  - Office of the Clerk-Recorder, 555 County Center, 1st Floor, Redwood City
- Or, drop off your voted ballot on Election Day from 7 a.m. - 8 p.m. at any polling place in the County of San Mateo.

### 4. Confirm Receipt of Your Voted Ballot

Go to [www.shepethefuture.org](http://www.shepethefuture.org) to track your ballot. Enter your:

House Number    Zip Code    Birth Date



The Ballot Tracker replies with the date your ballot was mailed to you and the date your voted ballot was received at the Elections Office.

FIG. 3. Back side, control inserts.

considered a series of comparisons between subgroups in our sample. Our large sample size makes it possible to conduct face-valid experimental comparisons between voters with different levels of experience with voting by mail. If voters' routines were disrupted, we would expect that voters with more experience with voting by mail would be the ones most likely to vote in person upon receiving the postage-paid envelopes.

TABLE 2. EFFECTS OF THE POSTAGE-PAID ENVELOPE ON VOTER TURNOUT

	Control Group	Treatment Group	p-value
Percentage voting	75.0	74.8	0.609
Percentage voting by mail	70.2	68.6	0.001
Percentage voting in person	4.8	6.2	0.000
N	138,840	10,000	

Note: Two-sided difference in proportions *p*-values are reported.

To measure prior experience, we examined each voter's participation in previous elections using data from the statewide voter registration database. We recoded voting history from five recent elections (June 2010, November 2009, November 2008, June 2008, and February 2008) into an index of "VBM experience," with values ranging from zero to five. For example, a voter with a value of five voted by mail in all five previous elections.

TABLE 3. MULTINOMIAL LOGIT FOR TURNOUT DECISION

*Dependent variable: Turnout decision*  
(0 = abstain, 1 = voted in person, 2 = voted by mail)

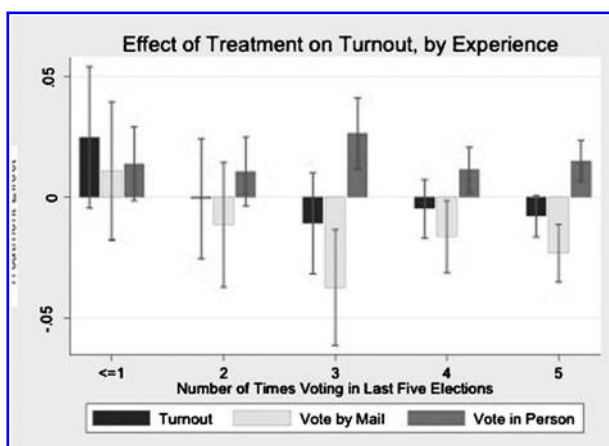
Voted in person	
Treatment group	0.231 (0.048)
Voted by mail	
Treatment group	-0.031 (0.025)
N	148,840

Notes: Standard errors (in parentheses) coded for clustering at the household level. Abstaining is the base outcome. Constant is omitted.



We then estimated linear probability models predicting turnout, voting by mail, and in-person voting with the treatment indicator and a host of covariates,<sup>5</sup> running separate regressions for the different values of VBM experience.<sup>6</sup> Figure 4 presents the treatment effects and associated 95% confidence intervals. The effect of the treatment on overall turnout generally decreases as VBM experience increases, with a negative treatment effect among voters who had voted absentee in all five of the previous elections. Consistent with our hypothesis, the free postage decreased the probability of voting by mail for voters with the most VBM experience (three or more times). The treatment appears to have caused these voters to shift to in-person voting. The effects of the treatment on voting by mail and voting in person were weak for voters with VBM experience of two or less. The postage-paid envelopes and instructional inserts appear to have affected the voting behavior of only those voters who had substantial experience with voting by mail, suggesting that the treatment disrupted those voters' routines.

In order to assess this apparent interaction more rigorously, we also estimated multinomial logits where we again defined voting as a three-outcome variable (abstained as the baseline category, voted in person, or voted by mail). The independent variables are a treatment group indicator, our index of VBM experience (0–5 times), and the interaction between these two variables. As shown in Table 4, there is a positive and significant interaction term



**FIG. 4.** Effect of treatment on turnout, by experience. *Note:* Estimates above are based on the regression of the voting variable on the treatment, indicators for voting in each of the previous five elections, a Democrat indicator, a Republican indicator, and age. Sample sizes for the five turnout categories above are 16,993; 22,700; 21,363; 26,717; 30,643.

**TABLE 4.** MULTINOMIAL LOGIT FOR TURNOUT DECISION, BY VOTING EXPERIENCE

<i>Dependent variable: Turnout decision</i> (0 = abstain, 1 = voted in person, 2 = voted by mail)	
Voted in person	
Treatment group	0.085 (0.076)
VBM experience	0.156 (0.011)
Treatment group × VBM experience	0.076 (0.035)
Voted by mail	
Treatment group	0.089 (0.047)
VBM experience	0.837 (0.006)
Treatment group × VBM experience	−0.060 (0.020)
N	148,840

Notes: Standard errors (in parentheses) are coded for clustering at the household level. Abstaining is the base outcome. Coefficients for covariates and the constant are omitted.

for voting in person ( $p = 0.032$ ), indicating that voters with more experience voting by mail were more likely than those with less experience voting by mail to vote in person in response to the postage-paid envelopes. For voting by mail, the interaction term is negative and statistically significant ( $p = 0.003$ ), suggesting that the treatment caused voters with more VBM experience to be less likely to vote by mail compared to those with less VBM experience.

One concern with the previous results is that VBM experience is related to voting by any means, so that the interaction term is picking up the effect that the treatment has according to overall voting propensity rather than the effect it has according to experience specifically with voting by mail. To address this concern, we estimated the multinomial logit only for people who had voted (by any method) in each of the previous five elections. By doing so, we focused on a group of people with the same level of voting experience, and we compared the effect of VBM experience among that group. This comparison is made somewhat more difficult by the fact that 89.7% of people in our sample of absentee voters who voted in the

<sup>5</sup>Covariates included: dummies for whether the voter was a registered Democrat or Republican (baseline category includes those registering with a third party or as Decline-to-State), dummy variables indicating whether the voter had voted in the five previous elections, age (with missing values recoded to zero), and an indicator representing whether age was missing for the voter. Note that this last variable represents an intercept shift for voters for whom age was missing, allowing us to include them in the regression model and not waste data.

<sup>6</sup>Due to limited sample size, we pooled voters whose VBM experience values were 0 and 1.

previous five elections voted by mail. Nevertheless, running the multinomial logit from Table 4 just for the five-time voters indicates that the treatment reduced voting by mail specifically for those voters with the most previous VBM experience (see Table 5). Compared to people who had voted by other means, we find that people with VBM experience were not significantly different in terms of their propensity to vote in person, but significantly less likely to vote by mail ( $p=0.017$ ). Combined with the results from Table 4, the results clearly indicate that the postage-paid envelopes made people with VBM experience less likely to vote by mail.

### QUALITATIVE INTERVIEWS

As Sherlock Holmes once remarked, “The temptation to form premature theories upon insufficient data is the bane of our profession” (Doyle 1993: 852). We needed more data. To supplement our statistical results, we conducted qualitative interviews to understand why a significant number of habitual VBM voters did not use the postage-paid envelopes. This approach is similar to the county’s method of conducting usability studies to test how real poll workers interact with printed polling place instructions or how citizens interact with the Elections Office website.<sup>7</sup> A random sample of 500 individuals from the treatment and control groups was selected to receive a recruitment postcard. The postcard offered \$25 for 15 minutes to help San Mateo County, and provided a website address and other contact information for one of the author’s offices.

TABLE 5. MULTINOMIAL LOGIT FOR TURNOUT DECISION FIVE-TIME VOTERS

<i>Dependent variable: Turnout decision</i> (0 = abstain, 1 = voted in person, 2 = voted by mail)	
Voted in person	
Treatment group	2.010 (1.331)
VBM experience	-0.620 (0.060)
Treatment group × VBM experience	-0.344 (0.273)
Voted by mail	
Treatment group	2.736 (1.268)
VBM experience	0.271 (0.050)
Treatment group × VBM experience	-0.617 (0.258)
N	31,721

Notes: Standard errors (in parentheses) are coded for clustering at the household level. Abstaining is the base outcome. Coefficients for covariates and the constant are omitted. 31,721 people in the sample voted in each of the previous five elections (2,112 people in the treatment group).

The website provided a pull-down menu of appointments; those registering were then contacted by email and given details about when and where to go, and what to expect. Participants were told that the research study in which they were participating was meant to help San Mateo County get feedback on its vote-by-mail materials in order to improve them.<sup>8</sup> This process yielded a total of 15 completed interviews, conducted between May 23 and June 8, 2011.

After signing an informed consent form, participants were shown the standard and experimental VBM instructional inserts and envelopes. For each set of materials, they were asked how they would respond to the mailing and whether there was anything about the materials that could be improved to make them easier to use. If they did not notice the instructions referring to postmarks, participants were then asked specifically to read the part of the insert that included this line, and asked if they thought this section of the instructions might be improved. Upon completion of the interview, each participant was debriefed and paid \$25 cash. The length of each interview ranged from 10 to 40 minutes.

Several themes emerged during the interviews. First, most participants noted that they usually do not read the instructions—they are familiar with the process. Several participants noted that they did not even remember that the inserts were included with their ballots; others noted that they might read the instructions if something seemed wrong. Second, more than half (9 of 15) of the participants were confused by the language about postmarks, but not in the manner in which we had hypothesized. The source of the confusion—and, we believe, the source of the counterintuitive statistical results presented above—is that many voters do not know what a postmark is. Several specifically asked if the postage-paid markings on the experimental envelope constituted a postmark. In one particularly revealing interview, Mr. Choy,<sup>9</sup> an elderly Asian American voter, read the instructions, looked at the postage-paid envelope again, then turned to the interviewer while pointing to the envelope and

<sup>7</sup>Personal communication with Carol Marks, San Mateo County Spokeswoman, on June 7, 2011.

<sup>8</sup>A report detailing the findings from the interviews was later delivered to San Mateo County Elections Office staff.

<sup>9</sup>Names used here have been changed.



asked, “this one is the postmark?” Another participant, Mr. Dunn, a middle-aged white man, read the section and commented, “Postmark—why would you want to mention that at all? The assumption is that the alternative is a stamp, so people might think ‘I can use a stamp or a postmark.’”

Other participants had similar comments:

“Postmarks are not accepted,” what the heck does that mean? You mean I can’t mail it? (Ms. Moore, an older white woman)

I never even use the instructions. What does “postmarks” mean? (Mr. McDonald, an older white man)

“Postmarks are not accepted,” what does that mean? I don’t get that. (Ms. LeMay, a middle-aged black woman)

Mrs. Choy, an older Asian American woman, was so clearly flustered by the “postmark” instructions that she declined to comment; her daughter, who was also present, said that her mother was very confused. Other participants were also put off by the language about postmarks; rather than saying that they would be confused, they phrased their concerns as related to third parties:

Maybe they think the postage-paid stuff is a postmark? It’s clear [the instructions] if it’s with a regular envelope. But folks might have been confused by the postmark line if the envelope is postage-paid. (Mr. Hood, a middle-aged white man)

The average person may have to think twice what postmark means. Or look up the word on the Internet. (Mrs. Mata, a middle-aged Asian American woman)

If “postmark” is used it should be defined. (Mrs. McDonald, an older white woman)

“Postmarks” is kinda confusing, people might not know what it means. (Ms. Choy, a young Asian American woman)

The discussion of postmarks turns out to be common among the instructions issued by California election officials. We collected the VBM inserts for all 58 counties in the state. In 38 of those counties, the inserts mention postmarks in the instructions, which may be a source of confusion.

Participants also commented on the instructional inserts and envelopes more generally. Mr. Reviv, a middle-aged white man, commented, “People don’t read instructions until something doesn’t work.” Mr. Dunn noted, “People look at that and their eyes glaze over.” When viewing the second set of instructions, accompanying the postage-paid envelope, Ms. Minter, an older white woman, noted, “I would double-check it [the instructions] because I’m used to putting a stamp on it.” Mrs. Mata noted, “I’ve been doing it so many years. I don’t even remember the instructions.” Other participants noted that the instructions are too long, and that everything important is on the envelope. “I probably won’t be reading it if it’s a lot of words,” said Ms. Choy. “Keep it simple. I have a million things to do. Keep it short and to the point,” said Ms. LeMay.

Kimball and Kropf (2005) note that the reading level for ballot instructions often far exceeds the reading abilities of registered voters. Our qualitative interview data confirm this finding, and pinpoints a problem with the use of the word “postmarks.”<sup>10</sup> The resulting confusion may have caused some experienced VBM voters to vote at their local polling place. Evidence for this conclusion is three-fold. First, voters do not read the instructions unless something seems to be wrong. Some long-time VBM voters, expecting to need to provide a stamp, saw something was different with the envelope and turned to the instructional inserts. Second, voters reading the instructions for some clue to why the envelope was unfamiliar were then faced with a sentence that they did not understand: “Sorry, by law, postmarks are not allowed.” For voters unfamiliar with this word, the new envelope was now suspect. Third, some of these voters—enough to cause a statistically significant effect in our quantitative results—chose not to use the postage-paid envelope and instead go to their local polling place, thus assuring that their votes would be counted. As Ms. Minter commented, “I know I have to do it right or it’s not gonna count.” Hence, the disruption in voting routines appears to have affected the voting behavior of some people

<sup>10</sup>Some participants noted other sections of the ballot that were also beyond their reading comprehension, such as not understanding the meaning of the word “gubernatorial” on the top of the instruction sheet.

because they were worried that their vote was not going to count.

## CONCLUSIONS

In collaboration with local election officials, we conducted a randomized field experiment in which postage-paid envelopes were provided to a random sample of 10,000 permanent VBM voters in San Mateo County, California, in advance of the November 2, 2010, general election. The intervention that was implemented in our experiment has been considered by legislators in California and has already been implemented in Hawaii, Minnesota, and Nevada.<sup>11</sup>

We expected the provision of postage-paid envelopes to have a positive effect on turnout among permanent absentee voters. The increased return rate of postage-paid versus postage-required envelopes is well documented by prior experiments (Armstrong and Lusk 1987; Price 1950). In today's environment of e-mail, e-bills, and other electronic forms of communication, stamps and "snail mail" are less common.<sup>12</sup> Thus, fewer individuals have stamps readily available. Anecdotal evidence supports the theory that some individuals with intentions of participating fail to do so for lack of a stamp (Burbanks 2010; Yousuf 2010). Although the cost in dollars to post a ballot is quite low, the increased convenience of a postage-paid envelope and the psychological impact of knowing that one need not "pay" to vote led us to predict that the treatment would result in a higher turnout rate. However, we found that the average treatment effect on turnout was zero.

Our results provide a cautionary tale for election administrators and get-out-the-vote (GOTV) researchers. First, while the intervention was designed to produce a small change in the cost and convenience of voting by using the registrar's own mailings, it nevertheless appears to have caused a disruption in voting procedures among some voters. Future research should assume that voters, particularly experienced ones, will notice when something is different with the normal voting process. Consequently, researchers and practitioners should take steps to ensure that their interventions do not result in voters becoming confused or suspicious.

That such disruptions can depress turnout is consistent with findings from previous research using natural experiments in California to estimate

the effect of assigning voters to all-mail precincts.<sup>13</sup> Kousser and Mullin (2007) find that voters assigned to vote by mail in November 2000 and November 2002 were less likely to vote than those who had the option, as usual, to vote at a physical polling place; Meredith and Malhotra (2011) find an effect of similar magnitude for the February 2008 presidential primary. Bergman and Yates (2011) find an even larger, negative effect of forced vote-by-mail on turnout in four elections between 2006 and 2008.

In another set of natural experiments, McNulty, Dowling, and Ariotti (2009) and Brady and McNulty (2011) found that turnout was depressed for individuals whose polling places were changed—a different, but still notable disruption in routine. In 2009, the change was due to a consolidation of polling places for a May 2006 school budget referendum in upstate New York. In 2011, the change was due to the special California gubernatorial recall election in October 2003. The intervention tested here—changing the VBM mailers and envelopes—similarly disrupted routine. While our experiment was designed to reduce the cost of voting by making it more convenient, any such effect was outweighed by the increased costs associated with requiring voters to learn new procedures. Such a mechanism may also be at play in recent findings by Monroe and Sylvester (2011) showing that low-propensity voters are less likely to respond to requests to become permanent vote-by-mail voters: the cost of learning how to do so may outweigh the subsequent reduced cost of participation.

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<sup>11</sup>These states provide postage-paid envelopes to absentee voters. Eligibility varies by state. Minnesota only offers absentee voting to individuals who can document that they are unable to vote in person, e.g., due to illness, disability, or religious observance (Office of the Minnesota Secretary of State 2011). Nevada offers no-fault absentee voting, but absentee status must be renewed in writing every calendar year (Clark County, Nevada 2011). Hawaii allows permanent no-fault absentee voting (Hawaii Office of Elections 2011). Of California's 58 counties, 12 provide postage-paid envelopes for returning vote-by-mail ballots.

<sup>12</sup>Mail volume at the United States Postal Service declined 20 percent between FY07 and FY10, continuing a trend in the declining use of the mail; officials cite "electronic alternatives" as responsible for the trend (Yousuf 2010).

<sup>13</sup>To estimate these effects, Kousser and Mullin (2007) and Meredith and Malhotra (2011) utilize the discontinuity caused by a law enabling county registrars to assign precincts with less than 250 voters to be mail-only precincts.

Second, our findings highlight the importance of writing voting instructions at a basic level with language that all voters will understand. While all vote-by-mail ballots must include guidelines as to how to ensure ballots are received in time to be counted, there is other language that could be substituted for the word “postmark” that might be more universally understood. As described earlier, we collected VBM instructions for all 58 counties in California. While 38 use the word postmark, others do not, instead simply noting that ballots must be received by Election Day. One improvement to San Mateo County’s voting materials, suggested by a number of participants in the qualitative phase of this research, is simply to eliminate the sentence about not accepting postmarks, leaving the two surrounding sentences about the deadline for receiving ballots and the recommended deadline for mailing them.

Our findings offer new insights into voter turnout. Our attempt to increase turnout by decreasing the costs of voting by providing free postage and making voting more convenient appears to have failed because it also disrupted VBM voters’ routines. These effects were most acute among those who had the most experience with voting by mail. While the usual cues were altered, leading people to read (perhaps for the first time) the instructional insert included with their VBM ballot, this disruption nonetheless did not deter some from voting in person and ensuring that their ballot was submitted.

In addition, the experiment has important implications for future efforts to increase voter turnout. First, subtle aspects of how policy changes are communicated may substantially affect how voters respond. Indeed, our results point to the need for more care with the wording of ballot instructions. Second, changes to voting procedures and materials should be highlighted, rather than hidden, in order to ensure that voters familiar with the process are not made suspicious. In this case, a sticker or post-it attached to the treatment envelope noting “NEW—No Stamp Needed!” might have helped ease voter concerns.

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