Vote.org 2018 SMS Voter Mobilization Program:
Message Test of Adopt-a-Voter vs. Calendar Reminder vs. Standard Practice

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Executive Summary

For the 2018 general election, Vote.org conducted SMS voter mobilization programs covering 12,681,951 people of color and unmarried women in 33 states. These programs used "cold" text messaging to registered voters who have no prior relationship to Vote.org.

This memo on the Adopt-a-voter vs. Calendar vs. Standard Practice message evaluates one in a series of tests embedded in Vote.org's SMS voter mobilization program for in-person voting. The overall impact of Vote.org's SMS voter mobilization program for in-person voting can be found in the memo "Vote.org 2018 SMS Voter Mobilization Program: Mobilization for In-person Voting from Any Treatment". The same messages were tested in a program encouraging the return of ballots in states where all voters receive their ballot in the mail (see memo on "Vote.org 2018 SMS Voter Mobilization Program: Encouraging Ballot Return in Postal Voting States Including Message Test of Adopt-a-Voter vs. Calendar Reminder vs. Standard Practice").

A 2017 test in Portland (OR) found the Adopt-a-voter and Calendar treatments each increased turnout, with the Adopt-a-voter generating a slightly but not significantly larger increase.[i] This 2018 test sought to replicate these results on a larger scale and in a higher salience election. The Adopt-a-voter treatment seeks to motivate turnout by reminding recipients of the social rewards of voting. The Calendar treatment seeks to increase turnout by using smartphone technology to set a personal reminder to vote. The 2018 test also combined these two paths to behavioral change (Adopt+Calendar). Vote.org's Standard Practice SMS treatment, identified in tests in 2016 and 2017, serves as the performance benchmark.

This experiment covered 2.2 million low propensity and/or newly registered voters in 11 states: Arizona, Florida, Kansas, Michigan, Mississippi, Montana, Nevada, North Carolina, Ohio, Tennessee, Vermont.

The Adopt-a-voter treatment was the most effective message for increasing turnout in this experiment, generating an increase in turnout of 0.22 percentage points at a cost per net vote of $101.27 (9.9 net votes/$1000). The Standard Practice treatment generated an increase in turnout of 0.10 percentage points at a cost per net vote of $222.8 (4.4 net votes/$1000). The Calendar and Adopt+Calendar treatments did not significantly increase turnout. Testing the same messages for encouraging the return of mail ballots in postal voting states produced a similar pattern.

In future "cold" SMS voter mobilization programs, Vote.org should consider the Adopt-a-voter message to be a best practice. Other tests indicate the Social Pressure treatment also outperforms the 2018 Standard Practice treatment (see "Vote.org 2018 SMS Voter Mobilization Program: Message Test of Social Pressure vs. Political Efficacy vs. Standard Practice"). Future research should compare these two treatment alternatives directly.

Objectives and Context

For the 2018 general election, Vote.org conducted SMS voter mobilization programs covering 12,681,951 people of color and unmarried women in 33 states. Despite widespread use, SMS messages have received little attention from researchers as a medium for campaign communication. In 2016, Vote.org established that "cold" SMS messages could increase turnout with a randomized experiment design covering 1.2 million young people of color and unmarried women in 7 states. Vote.org's 2016 "cold" SMS voter mobilization program increased turnout by 0.2 percentage points. In 2017, Vote.org replicated and expanded testing of "cold" SMS voter mobilization with a randomized experiment covering 714k young people of color and unmarried women for the Virginia gubernatorial and legislative elections. Vote.org's 2017 test of "cold" SMS voter mobilization increased turnout by 0.6 percentage points and identified Standard Practices regarding timing and message framing.

The 2018 programs build on Vote.org's successful SMS voter mobilization programs in 2016 and 2017. This memo evaluates testing additional message frames to determine the most effective methods of increasing voter turnout via SMS messages. Practical constraints of implementing delivery of the SMS messages required executing each message test in a subset of states. Each message test includes the Standard Practice treatment derived from the 2016 program as a shared benchmark. This memo is one of a series examining each message test. This memo evaluates a comparison of Adopt-a-voter vs. Calendar vs. Standard Practice messages. The same set of messages were tested in a program encouraging the return of ballots in states where all voters receive their ballot in the mail (see "Vote.org 2018 SMS Voter Mobilization Program: Encouraging Ballot Return in Postal Voting States").

The Adopt-a-voter and Calendar treatments are based on an SMS experiment conducted in a local election in Portland, OR in 2017.[ii] Both treatments generated statistically significant increases in turnout in this experiment, with the Adopt-a-voter treatment effect slightly but not statistically significantly larger. The behavioral theory behind each treatment is discussed in the "Treatments" section below. The 2018 test adds an Adopt+Calendar treatment to determine if combining the two behavioral mechanisms increases turnout more than either mechanism separately.

This test was conducted across 2.2 million low propensity and/or newly registered voters in 11 states: Arizona, Florida, Kansas, Michigan, Mississippi, Montana, Nevada, North Carolina, Ohio, Tennessee, Vermont. These states cover a range of electoral contexts (defined by competitiveness, voting procedures, and other characteristics). In six states with extensive EIPV use, the treatments were targeted at both EIPV and EDay voting: Arizona, Florida, Kansas, Nevada, North Carolina, Tennessee. In five states, the treatments targeted only EDay voting: Michigan, Mississippi, Montana, Ohio, Vermont.

In the states with EIPV and EDay voting, the 2018 SMS voter mobilization program addresses a secondary research question about mobilization for these two types of in-person voting: is it more effective to mobilize voters to vote early, to vote on Election Day, or to mobilize for early voting and then for Election Day voting? To the best of our knowledge, this question has received almost no attention despite the widespread availability of early in person voting. Therefore, treatment records in these states are assigned to mobilization for EIPV only, Election Day only, or both. This research question is evaluated in a separate memo, "Vote.org 2018 SMS Voter Mobilization Program: Timing of Encouraging In Person Voting for Early Voting or Election Day".

The overall impact of Vote.org's SMS voter mobilization program can be found in the memo "Vote.org 2018 SMS Voter Mobilization Program: Mobilization for In-person Voting from Any Treatment".

Selected Universe

The data for the experiment was selected by Vote.org from the voter file maintained by TargetSmart, a firm providing voter data.

The 2,162,309 registered voters included in the experiment met the following criteria:

1) A cell number available in the TargetSmart database
   - TargetSmart provided the best single record for each available cell phone number (i.e. no duplicate numbers)
2) Registered to vote in the following states:
   - Arizona
   - Florida[iii]
   - Kansas
   - Michigan
   - Mississippi
   - Montana
   - Nevada
   - North Carolina
   - Ohio
   - Tennessee
   - Vermont
3) Low propensity voter or new registrant:
   - 10-70 Vote propensity OR
   - Voted in Gen 2016 and registered between Dec 2014-Nov 2016 OR
   - Registered December 2016-present)
4) People of color or unmarried women:
   - People of color: individuals coded as non-white by TargetSmart or individuals residing in areas with a Census population of at least 67% non-white.
     - The latter criteria is intended to capture false negatives for non-white in the individual coding data. The race coding is based on state voter file information about race (where available) and proprietary models of race maintained by TargetSmart.

- Females under age 30 who were not included using the criteria above
  - Arizona, Michigan, Nevada and Vermont only.
5) Exclusions:
- Request mail ballot for Gen 2018 -OR- permanent mail ballot status
- Age under 18 years old or over 100 years old

Treatments:

The experiment compares an uncontacted control group to four treatments: 1) Standard Practice, 2) Adopt-a-voter, 3) Calendar, and 4) Adopt+Calendar. Examples of each treatment are in the Appendix.

In states without EIPV, each treatment consisted of a series of three SMS messages. In states with EIPV, treatment consisted of a series of three to five SMS messages. The three message series were identical to the non-EIPV states. In the five message series, the first two messages were repeated (1st & 3rd; 2nd & 4th) for EIPV and then EDay voting. In this memo, the three and five message treatments in EIPV states are pooled. As noted above, the differences between assignment to three messages for EIPV, three messages for EDay, and five messages for both EIPV and EDay is evaluated in a separate memo "Vote.org 2018 SMS Voter Mobilization Program: Timing of Encouraging In Person Voting for Early Voting or Election Day".

The Standard Practice treatment is based on prior tests and programs by Vote.org. The Standard Practice treatment relies on positive descriptive norms, civic duty and information about voting to increase turnout. These tactics are very common in voter mobilization and have been successful in randomized controlled tests of mail, phone calls and canvassing (see Green and Gerber 2015 for review).[iv]

The Adopt-a-voter and Calendar treatments are based on an SMS experiment conducted in a local election in Portland, OR in 2017.[v] Both treatments generated statistically significant increases in turnout in this experiment, with the Adopt-a-voter treatment effect slightly but not statistically significantly larger.

For the Adopt-a-voter treatment, the first message for each method of voting encouraged recipient to get friends and family members to vote. The Adopt-a-Voter treatment is based on leveraging the social rewards from voting.[vi] Delivering similar Adopt-a-Voter treatments by phone has successfully increased in-person voter turnout.[vii] The remaining messages in the treatment were identical to the Standard Practice treatment.

For the Calendar treatment, the second message for each method of voting includes an option to create a reminder to vote in the recipient's smartphone calendar. The Calendar treatment was based on the "plan-making" mechanism originally investigated as a voter mobilization strategy by Nickerson and Rogers (2010) and now used in an array of voter mobilization experiments that have increased turnout (see Green and Gerber 2015).[viii] The remaining messages in the treatment were identical to the Standard Practice treatment.

The Adopt + Calendar treatment includes both the Adopt-a-voter message (1st) and Calendar messages (2nd), along with the informational messages used in all treatments. The remaining messages in the treatment were identical to the Standard Practice treatment.

Prior to each round of text messages, anyone who "opted out" of receiving text messages was removed from the contact list. Also, anyone who who cast a ballot (EIPV or mail ballots) according to public records acquired by TargetSmart LLC were removed from the contact list upon Vote.org's receipt of this information.

Intended Effects[ix]

- Each treatment was intended to increase turnout in the November 2018 election.

- Each treatment was expected to have different effects on turnout.

Evaluation Design

The evaluation is based on a randomized trial design (or field experiment) that is considered best practice by academic researchers and the Analyst Institute. Each treatment group received SMS messages from Vote.org; the control group was sent none of the SMS messages.

The randomization is conducted at the household level to reduce the risk of contaminating behavior of co-habitants. For this experiment, households were defined as people with the same mailing address. The randomization uses an automated re-randomization procedure to ensure good balance in characteristics available from the voter file prior to delivery of treatment (see Technical Appendix).

Random Assignment to Treatment & Control

|	Individuals	%
Standard Practice	432,706	20%
Adopt-a-voter	432,688	20%
Calendar	432,308	20%
Adopt+Calendar	432,346	20%
Control	432,261	20%

Results

In the Adopt-a-voter vs. Calendar vs. Standard Practice message test, the Adopt-a-voter message appears to be the most effective message (see graph below). The Adopt-a-voter treatment significantly increased turnout in these eleven states by 0.22 percentage points.[x] The Standard Practice treatment appeared increase turnout by 0.10 percentage points, although this effect was short of statistical significance.[xi] Neither the Calendar nor the Adopt+Calendar treatments had any statistically discernable effect on turnout.

The differences across these four treatments fails to reach statistically significance,[xii] although the substantive magnitude of the differences suggests the Adopt-a-voter message should be considered ahead of Standard Practice in future programs.

Note on reading the graphs in this memo: The estimated treatment effect is represented by the diamond shape in the middle of each bar. The gradient error bars display the statistical uncertainty of this estimate. Like traditional error bars, the ends of the gradient error bars indicate the 95% confidence range. If these bars cross the red horizontal line at zero, the difference from the control group is not statistically significant. The width and intensity (darkness) of the bar indicate the statistical likelihood that the treatment effect falls in this range, so the bars are wider and darker close to the diamonds, thinning and fading farther away. When comparing to treatment effects, the likelihood of being different can be seen by the width and intensity of the overlapping gradient bars.[xiii]

Avg Treatment Effect on Turnout by Each Treatment
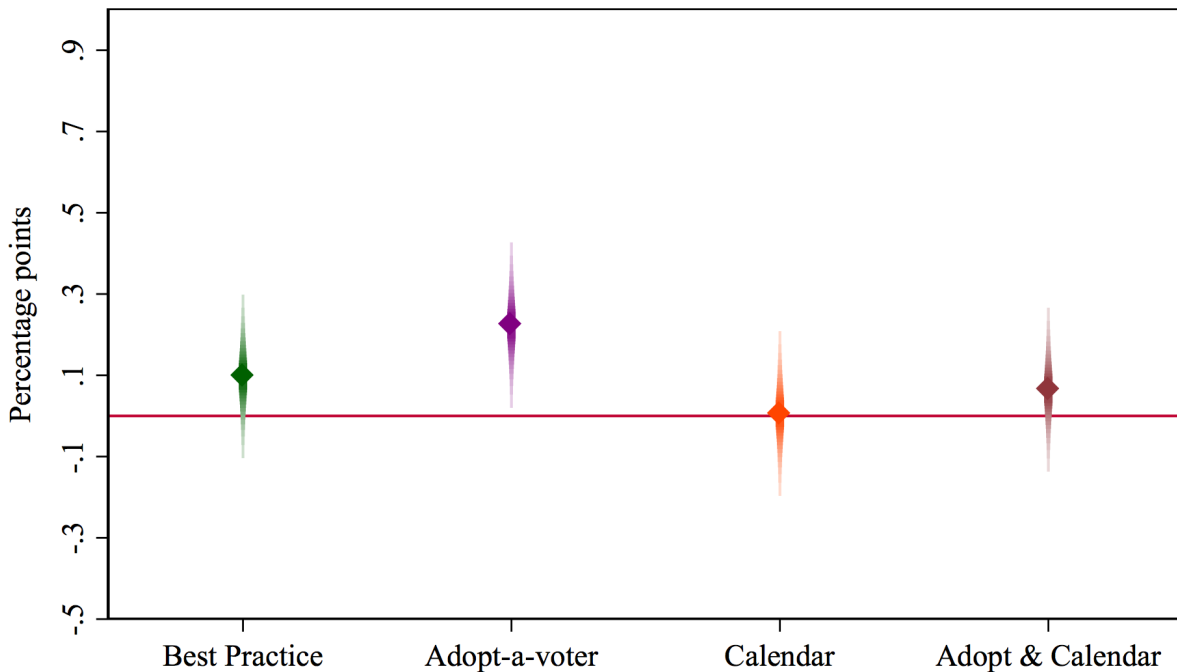
Notes: Turnout in control group = 58.78%. Difference in treatment effects is *not* statistically significant (p=0.197). Treatment effects estimated from regression with covariates for precision. Gradient confidence intervals by line width and intensity (max=95% c.i.). If confidence intervals cross line at zero, then effect is not statistically significant.

Net Votes

The cost per net vote (and net votes/$1000) calculation includes all costs of design, delivering, and managing the treatment delivery process.

Treatment	Effect	Net Votes	Votes/$1000	CPV	Treatment Cost
Standard Practice	0.10 pp	433	4.5	$222.80	[$0.2228/individual]
Adopt-a-voter	0.22 pp	952	9.9	$101.27	[$0.2228/individual]
Calendar	0.01 pp	43	0.4	$2,228.00	[$0.2228/individual]
Adopt+Calendar	0.06 pp	259	2.7	$371.33	[$0.2228/individual]

Notes: Treatment cost reflects average cost for the series of SMS messages in each treatment. Net votes is the number of people who <u>voted</u> in response to the treatment(s), and would not have otherwise voted in the November 2018 election.

Lessons Learned

Vote.org's strategy of using "cold" SMS messages for voter mobilization continues to generate significant and cost-effective increases in voter turnout in mid-term elections.

The Adopt-a-voter message frame appears more effective than prior Standard Practice, and therefore should be considered for use in future programs.

The Calendar treatment and Adopt+Calendar treatment show no evidence of being effective and therefore should **not** be used again.

Future Steps

Vote.org should continue to invest in "cold" SMS voter mobilization programs to increase voter turnout.

Vote.org should consider the Adopt-a-voter message in future "cold" SMS mobilization programs and test against other message frames that outperformed the prior Standard Practice treatment in other 2018 tests.
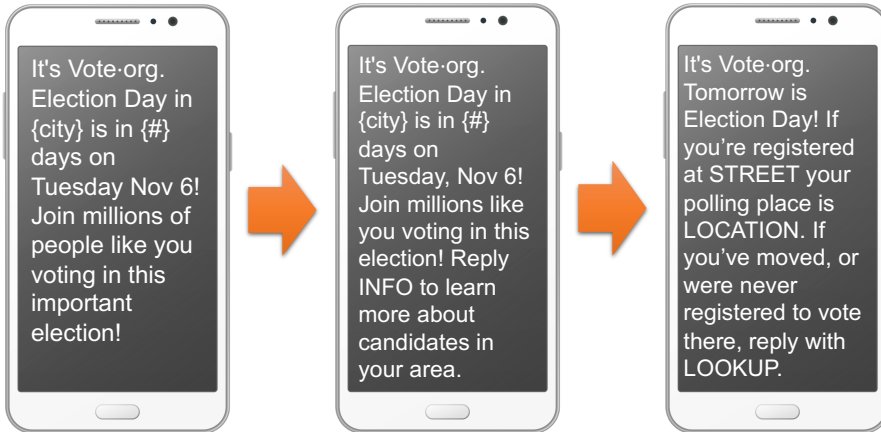
Cautions

The effect of any voter mobilization communication is conditional on the execution of the program, the jurisdiction, the type of election, the level of interest in the election, and the activities of other organizations. Repeating these treatments in other election contexts or with variations of the treatments could produce different results.

Appendix: Examples of Treatments

Standard Practice

- Series of 3 text messages for Election Day

It's Vote·org. Election Day in {city} is in {#} days on Tuesday Nov 6! Join millions of people like you voting in this important election!

It's Vote·org. Election Day in {city} is in {#} days on Tuesday, Nov 6! Join millions like you voting in this election! Reply INFO to learn more about candidates in your area.

It's Vote·org. Tomorrow is Election Day! If you're registered at STREET your polling place is LOCATION. If you've moved, or were never registered to vote there, reply with LOOKUP.

- Based 2016 & 2017 testing by **VOTE.ORG**

Adopt-a-Voter

It's Vote·org. Make sure your friends and family vote! Election Day in {city} is in {#} days on Tuesday Nov 6. Make sure they vote in this important election.

It's Vote·org. Election Day in {city} is in {#} days on Tuesday, Nov 6! Join millions like you voting in this election! Reply INFO to learn more about candidates in your area.

It's Vote·org. Tomorrow is Election Day! If you're registered at STREET your polling place is LOCATION. If you've moved, or were never registered to vote there, reply with LOOKUP.

- Based on successful SMS mobilization in Portland, OR 2017 (Mann 2018)

Calendar

It's Vote·org. Election Day in {city} is in {#} days on Tuesday Nov 6! Join millions of people like you voting in this important election!	It's Vote·org. Election Day in {city} is in {#} days on Tuesday Nov 6! Set a reminder on your phone to vote on Election Day. Want a calendar reminder? Reply REMIND for a link.	It's Vote·org. Tomorrow is Election Day! If you're registered at STREET your polling place is LOCATION. If you've moved, or were never registered to vote there, reply with LOOKUP.

- Based on successful SMS mobilization in Portland, OR 2017 (Mann 2018)

Adopt + Calendar

It's Vote·org. Make sure your friends and family vote! Election Day in {city} is in {#} days on Tuesday Nov 6. Make sure they vote in this important election.	It's Vote·org. Election Day in {city} is in {#} days on Tuesday Nov 6! Set a reminder on your phone to vote on Election Day. Want a calendar reminder? Reply REMIND for a link.	It's Vote·org. Tomorrow is Election Day! If you're registered at STREET your polling place is LOCATION. If you've moved, or were never registered to vote there, reply with LOOKUP.

- Based on successful SMS mobilization in Portland, OR 2017 (Mann 2018)

Technical Appendix

Randomization Procedure:

Randomization was conducted at the household level. The random assignment was conducted in Stata using the "re-randomize" procedure developed by Kennedy and Mann (2015) to ensure balance across observable covariates.[xiv]

This procedure rejects any instance of randomization outside of pre-determined parameters: minimum of 10 iterations and maximum of 25 iterations. Iterations stopped between 10 and 25 when iteration had p>0.8 based on Malahanobis distance test. This procedure produced equal sized groups, and each group was designated as an experimental condition. Blocked randomization used equal probabilities of assignment in all blocks.

Blocked randomization using the following variables: State, Young (under 30 years old), Quality of cell phone match to individual (three strata based on TargetSmart cell phone match confidence code)

Balance checked using age, female, individual-level race codes (Hispanic, African American, white), past voting history (dummies for voting in the 2010, 2012, 2014, and 2016 general elections), and three-digit zip-code (geography).

Statistical Methods for Analysis:

The analysis is based on matching the pre-election experimental population to post-election vote history from TargetSmart. The matching used the unique TargetSmart record identification number. Analysis was conducted using standard regression techniques for evaluating experimental results.

Hypothesis testing uses robust standard errors clustered by unique address to account for potential correlation between the behaviors of co-habitants.

All reported estimates are calculated using models that include the covariates used to check balance in the random assignment procedure. As expected from a well-balanced experiment, the estimates are essentially identical when estimated without these covariates.

Technical Endnotes

[i] Mann, Christopher B. 2018. Encouraging Ballot Return via Text Message: Portland Community College Bond Election 2017. Retrieved from https://stonesphones.com/wp-content/uploads/2018/10/Portland_Text_Message_Ballot_Chase_-_Evaluation_Memo.pdf.
[ii] Ibid.
[iii] Individuals in Florida were randomly assigned to this experiment (50%) or the Candidate Name vs. Standard Practice message test (50%).
[iv] Green, Donald P., and Alan S. Gerber. 2019. *Get Out the Vote: How to Increase Voter Turnout*. 4th ed. Brookings Institution Press.

[v] Mann, Christopher B. 2018. Encouraging Ballot Return via Text Message: Portland Community College Bond Election 2017. Retrieved from https://stonesphones.com/wp-content/uploads/2018/10/Portland_Text_Message_Ballot_Chase_-_Evaluation_Memo.pdf.

[vi] Rolfe, Meredith. 2012. *Voter Turnout: A Social Theory of Political Participation*. Cambridge University Press.; Sinclair, Betsy. 2012. *The social citizen: Peer networks and political behavior*. Chicago: University of Chicago Press.

[vii] Mann, Christopher B., & Klofstad, Casey. 2011. Voter mobilization through friends and family: social priming of political participation. *Paper presented at the 2011 Annual Meeting of the American Political Science Association*.

[viii] Nickerson, David W., and Todd Rogers. 2010. "Do You Have a Voting Plan?: Implementation Intentions, Voter Turnout, and Organic Plan Making." *Psychological Science* 21(2): 194–99; Green, Donald P., and Alan S. Gerber. 2019. *Get Out the Vote: How to Increase Voter Turnout*. 4th ed. Brookings Institution Press.

[ix] Following best practice in academic research, the intended treatment effects and plans for analysis were pre-registered with the Evidence in Governance and Politics program at the University of California at Berkeley (egap.org).

[x] Avg. treatment effect for Adopt-a-voter compared to the control group is statistically significant at p=0.016, one-tailed. SE = 0.010

[xi] Avg. treatment effect for Standard Practice compared to the control group is statistically significant at p=0.172, one-tailed. SE = 0.010

[xii] Difference in avg. treatment effect across two voting method combination treatments is not statistically significant at p=0.197.

[xiii] Research by Isabelle Fischer (2018) finds that people are much more likely to correctly interpret data displayed with gradient error bars than other more commonly used data visualizations.

[xiv] Kennedy, Chris, and Christopher B. Mann. 2015. *RANDOMIZE: Stata Module to Create Random Assignments for Experimental Trials, Including Blocking, Balance Checking, and Automated Rerandomization*. Boston College Department of Economics. https://ideas.repec.org/c/boc/bocode/s458028.html (May 16, 2017).