Information Seeking and Voter Turnout: Evidence from Search Data*

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Abstract

Scholars often attribute low voter turnout in the U.S. to the costs of voting. Voting requires citizens to overcome time and information costs related to both their vote choice and the act of voting itself. Scholars have examined institutional (e.g., early voting) and informational (e.g., candidate advertising) mechanisms to reduce the costs of voting, with mixed findings about their effect on turnout. Does successful information seeking help voters overcome these costs and turn out? Here, we present initial results from collaboration with MapLight, a nonpartisan research organization, to examine the connection between information-seeking behavior and voter turnout. Maplight's Voter's Edge is an online tool that provides citizens with information on where and when to vote, and on the candidates and issues on their ballot. We match addresses searched on Voter's Edge to the New York statewide voter file. Our pilot study suggests that those who used Voter's Edge were marginally more likely to vote in November 2016 than similar citizens that did not use Voter's Edge, a finding is consistent with theories that reducing informational costs can increase turnout.

1 Introduction

U.S. voter turnout trails turnout rates in most other developed countries. According to a report published by the Pew Research Center, the U.S. ranks 31st among the 35 countries in the Organization for Economic Cooperation and Development. U.S. turnout in the 2012 presidential election was 53.6%. In contrast, voter turnout in the most recent presidential elections in Belgium, Turkey, and Sweden was 87.2%, 84.3%, and 82.6%, respectively.

Why is this? Scholars of Americans politics have long emphasized the high cost of voting in U.S. elections. Most models of voter turnout view voting as a rational decision, wherein an individual will vote only when the benefits of doing so outweigh the costs (e.g., Downs 1957; Riker and Ordeshook 1968). The costs of voting come in two basic forms: time and information. In many states, citizens must register to vote well before the election, and can vote only on Election Day, with no option to vote early or even absentee without a legitimate excuse (e.g., out-of-town on Election Day). Such restrictions increase the costs of voting by making it more difficult for individuals to participate. Voters also need information about Election Day itself – where to go, when the polls are open, and (optionally) details about candidates and issues on the ballot. Few individuals have such detailed information, and as such, voters must pay a cost in order to learn enough to participate. Efforts to reduce the time and information costs of voting include both institutional and informational mechanisms. Election reformers across the country have introduced new laws that allow Election Day registration, no-fault absentee ballot voting, and early voting. The evidence connecting these various to increases in voter turnout, however, has proven to be decidedly mixed (e.g., Fitzgerald 2005; Highton 1997; Leighley and Nagler 2013; Neeley and Richardson 2001; Stein 1998). Campaigns and other political actors have played a key role in providing information to voters. Here, research suggests that those citizens contacted by political elites become informed about the election and the choices and as a result, are more likely to vote (e.g., Hillygus 2005; Rosenstone and Hansen 1993; Verba, Schlozman, and Brady 1995).

Yet, a fundamental problem exists in the study of candidate contacting and the effect of

information on voter turnout: candidates might be more likely to target those who usually vote than those who usually do not. As a result, finding that campaign mobilization tactics induce voter turnout could simply be a function of the greater likelihood to target likely voters. Indeed, this represents sensible strategic behavior on the part of campaigns and advocacy groups. Given this, our understanding of the informational mechanism to reducing the costs of voting is limited by a selection issue. We attempt to provide an alternative perspective on this problem by studying *information-seeking* behavior and voter turnout. We do so with a unique source of data and a research design aimed at overcoming the issue of selection. Specifically, we argue that information-seeking behavior—where voters seek to reduce the costs of voting on their by learning about the candidates, how, and where to vote—will increase voter turnout. To test our expectations, we partnered with MapLight, a nonpartisan non-profit research organization. MapLight runs Voter's Edge, a platform designed to provide voters in three states—California, Illinois, and New York—with information about their ballot. Prior to Election Day, users input their zip code and street address, and can then access their personalized ballot, information on candidates, measures, and who supports them, and information on where, when, and how to vote. In short, Voter's Edge serves as an informational mechanism to reduce the costs of voting.

We link the street addresses searched on Voter's Edge to statewide voter files, enabling us to connect the behavior of citizens prior to Election Day to their behavior on Election Day. Nevertheless, we recognize that those individuals who seek information might be fundamentally different than those individuals who do not seek information. Like those targeted voters by campaigns, those who use Voter's Edge might simply be more likely to vote (based on demographics and previous voting behavior). To address this concern, we exactly-match each individual who used Voter's Edge to a citizen who did not vote, but who is otherwise similar on a range of covariates: age, gender, party affiliation, and previous turnout history. In sum, our research design enables us to estimate the effect of information on voter turnout with confidence that our estimates reflect only the influence of information-seeking—and

not the influence of direct strategic behavior by elites. In doing so, we find in our first pilot sample a turnout difference of about $\frac{1}{2}$ of a percentage point in November 2016 presidential election in New York state.

2 Reducing the Costs of Voting: Institutional and Informational Mechanisms

We proceed under a rational choice framework of voter turnout, as conceptualized by Downs (1957) and elaborated by Riker and Ordeshook (1968). Downs assumed that turnout is a "rational," rather than expressive, act. That is, the decision to vote is a calculation of the costs and benefits of doing so. The conclusion of his model is rather simple: "if the returns to voting outweigh the costs, he votes; if not, he abstains." Factors including the perception of policy differences between the candidates and the closeness of the election determine the benefits of voting. Yet, in his framework, candidates' positions will be similar and one's impact on the election minimal. As a result, costs are important: the information costs and the physical costs required might be enough on their to deter most citizens.

There are two general approaches to reducing the costs of voting: institutional and informational. The institutional approach emphasizes changing election law to better accommodate voters. In the U.S., voting his historically been a one-day affair, offering voters only a single chance to cast their ballot. Moreover, many states maintain rather strict rules regarding when individuals are allowed register yet still be eligible for an upcoming election (i.e., only well before Election Day) and whether those who be unable to vote on Election Day—for any reason—can still participate. Thus, reformers hoping to decrease the costs of voting point to three main mechanisms: early voting, Election Day registration, and no-fault absentee ballot voting. These three reforms are designed to designed to lower the costs of voting by increasing the opportunity to do so: Election Day registration would allow unregistered voters to do so immediately prior to casting their ballot, while no-fault absentee

ballot voting and early voting ensure that those who cannot vote at their polling place on Election Day will not be entirely excluded from the process.

The empirical evidence on the consequences of these reforms—with the exception of Election Day registration—appears decidedly mixed. Studies of Election Day registration consistently show a positive and substantively significant effect of about 3 to 5 percentage points on voter turnout (e.g., Brians and Grofman 1999; Fitzgerald 2005; Hanmer 2007; Highton 1997; Leighley and Nagler 2013). Research on the effects of early voting, however, suggests that early voting simply enables those who would otherwise still vote to cast their ballot earlier. But, research suggests that early voting has no little to no effect on turnout levels among those who would otherwise not vote at all (Fitzgerald 2005; Gronke, Galanes-Rosenbaum, and Miller 2007; Neeley and Richardson 2001; Stein 1998; Stein and Garcia-Monet 1997). Others find more nuanced efforts, such that early voting leads to greater turnout when first adopted before disappearing in only two election cycles (Giammo and Brox 2010). Leighley and Nagler (2013) find that early voting can increase turnout, but only when the early voting period lasts for at least 27 days prior to Election Day, suggesting that the costs of voting must be reduced quite substantially before the returns to voting increase.

Work on no-fault absentee ballot voting also produces inconsistent findings. Absentee ballot voters tend to be more educated and more politically engaged than Election Day voters, which again suggests that absentee ballot voting might not be increase turnout but instead make it more convenient for those who would otherwise vote (e.g., Barreto et al. 2006; Fitzgerald 2005; Giammo and Brox 2010; Gronke, Galanes-Rosenbaum, and Miller 2007). Leighley and Nagler (2013), though, find that no-fault absentee ballot leads to a 3.2 percentage-point increase in voter turnout. Relative to Election Day registration and early voting, their estimates suggest that the adoption of no-fault absentee ballot voting might be the single most important change made to election law since the Civil Rights Act.

The informational approach to reducing the costs of voting emphasizes the challenge

citizens face in learning about the election and the candidates for office. In order for voters to discern the policy differences between two candidates—and as a result, better understand the potential benefits to voting—they must, at minimum, be aware that there is an election, must know which candidates are running, and must be able to access enough information about each candidate to tell the two apart. As one can imagine, doing so imposes a significant cost of voters—and indeed, gathering such information might not even possible even with endless time. Candidates, campaigns, and parties, though, serve to provide information and reduce the costs to voting. During an election, elite political actors routinely seek to persuade and mobilize voters by providing information about who is running and why they are running. Much of this information comes in the form of policy positions, yet many appeals might also include instructive information on how and where to vote. In short, political actors might be an important informational mechanism designed to reduce the costs and increase the returns to voting.

Much research examines the impact of persuasion and mobilization efforts—or, information-providing efforts—on voter turnout. Rosenstone and Hansen (1993), Verba, Schlozman, and Brady (1995), and Wielhouwer and Lockerbie (1994) show that voters contacted by political elites—such as campaigns and parties—are more likely to vote. The effects of contacting can even extend to other, more high-cost (e.g., attending a rally) forms of political participation. Gerber and Green (2000) show that grassroots campaign efforts, such as door-to-door canvassing, can increase voter turnout. Panagopoulos, Leighley, and Hamel (Forthcoming) show that telling voters that a candidate from their county is on the ballot increases voter turnout. A large literature also explores the effects of campaign ads on voter participation. Ansolabehere and Iyengar (1995) show that campaign advertisements can increase voter turnout (but see, e.g., Krasno and Green 2008). Freedman, Franz, and Goldstein (2004) find that survey respondents in 2000 were as much as 10 percentage points more likely to vote if they television in markets saturated with campaign ads. Hillygus (2005) reports that exposure to campaign ads increased the intent to vote by roughly 18 percentage points. In

sum, these studies suggest that political elites inform people about the candidates and their positions, and in doing so, reduce the information costs associated with voter turnout.

3   Online Information-Seeking by Voters

Our paper considers informational rather than institutional attempts to reduce the costs of voting. However, rather than consider elite attempts to provide information, we examine when voters themselves choose to actively seek information about Election Day. In particular, we note the substantive and empirical challenges—one that has motivated many field experimental studies of voter participation—associated with assessing the relationship between the activities of elites and the voting behavior of citizens. Specifically, facing budget constraints, political elites select the subset of citizens to provide information to. Contemporary political operations draw on vast amounts of public and private data to prioritize the targeting of certain voters over others (e.g., Hersh 2015). For example, a Democratic campaign will primarily seek to persuade (as needed) and mobilize Democrats and Democratic leaners *who are most likely to vote.* It is hard to imagine a campaign and party investing a significant portion of its resources of mobilizing those who are registered but have never once been to the polls. In the end, what this suggests is that studies examining the effect of party activities on turnout are upwardly biased. We examine the effect of *information-seeking* behavior on turnout to provide an alternative perspective that relies less on elite strategy and behavior, and instead on focuses on voters themselves obtaining widely-available public information. To do so, we have identified a unique source of data—search data from Map-Light's Voter's Edge—and an appropriate and well-identified research design that allows us to overcome the challenge of selection.

MapLight is a nonpartisan non-profit organization. For the most part, their research focuses on the influence of money in politics. MapLight has also developed Voter's Edge, a "comprehensive, nonpartisan online guide to federal, state, and local elections in California,

Illinois, and New York." The tool is extremely easy to use. Individuals simply provide their ZIP code and street address. Figure 1 below shows the Voter's Edge interface, where users are first asked to select their state before entering their zip code and street address.
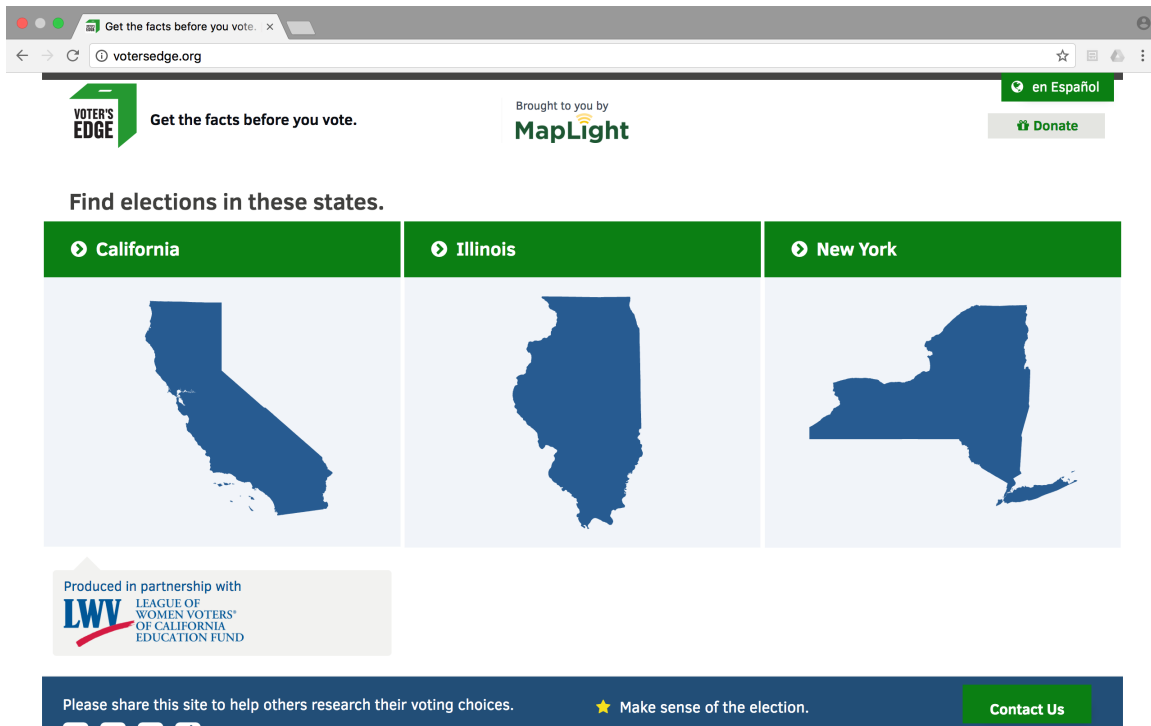
(a) State Selection
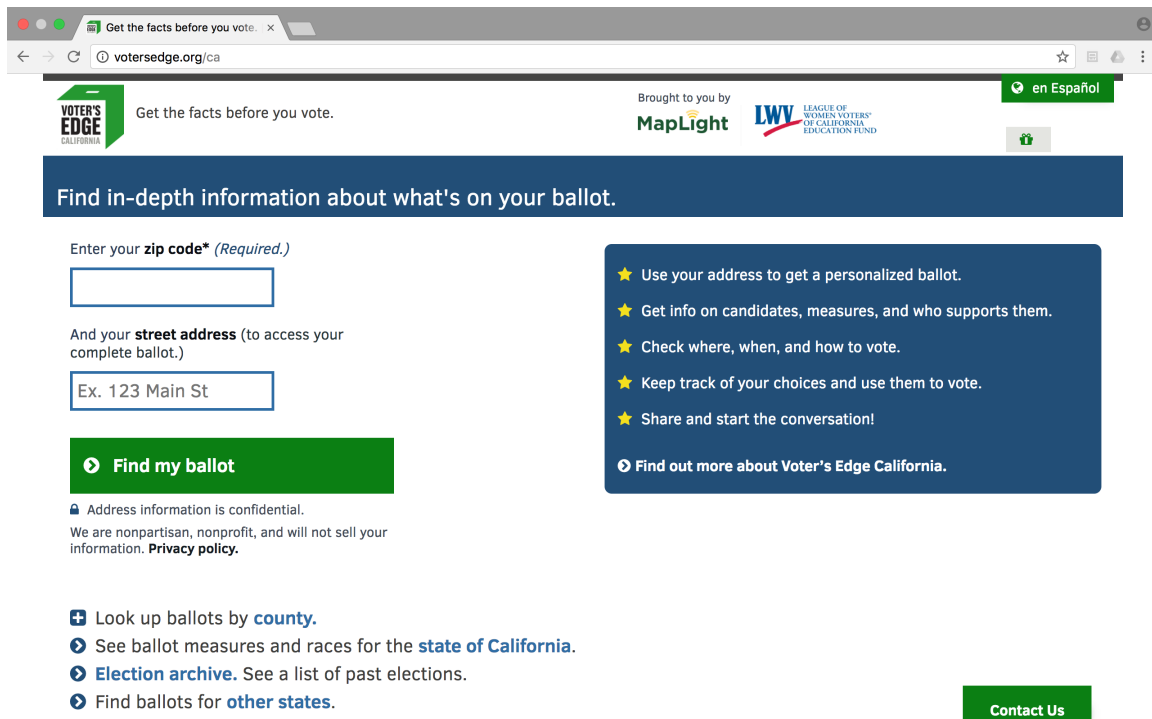
(b) Entering Zip Code and Street Address

Figure 1: Voter's Edge Interface

Following this, individuals gain access to their full, personalized ballot, in-depth information on candidates (biographies, photos, top policy priorities, endorsements, and detailed information on their campaign contributors), as well as information on where, when, and how to vote. In short, Voter's Edge offers voters in these states a "one-stop shop" for information about the election. We anticipate that using Voter's Edge will significantly reduce the informational costs of voting: voters learn about the races on their ballot, the candidates running in each of them, each candidate's policy platform, and, critically, where and when to vote. Figure 2 provides an example, using an address in Los Angeles, California. Currently, Voter's Edge offers information about a local election on May 16, 2017. In short, Voter's Edge helps voters address both the time and informational constraints they face.
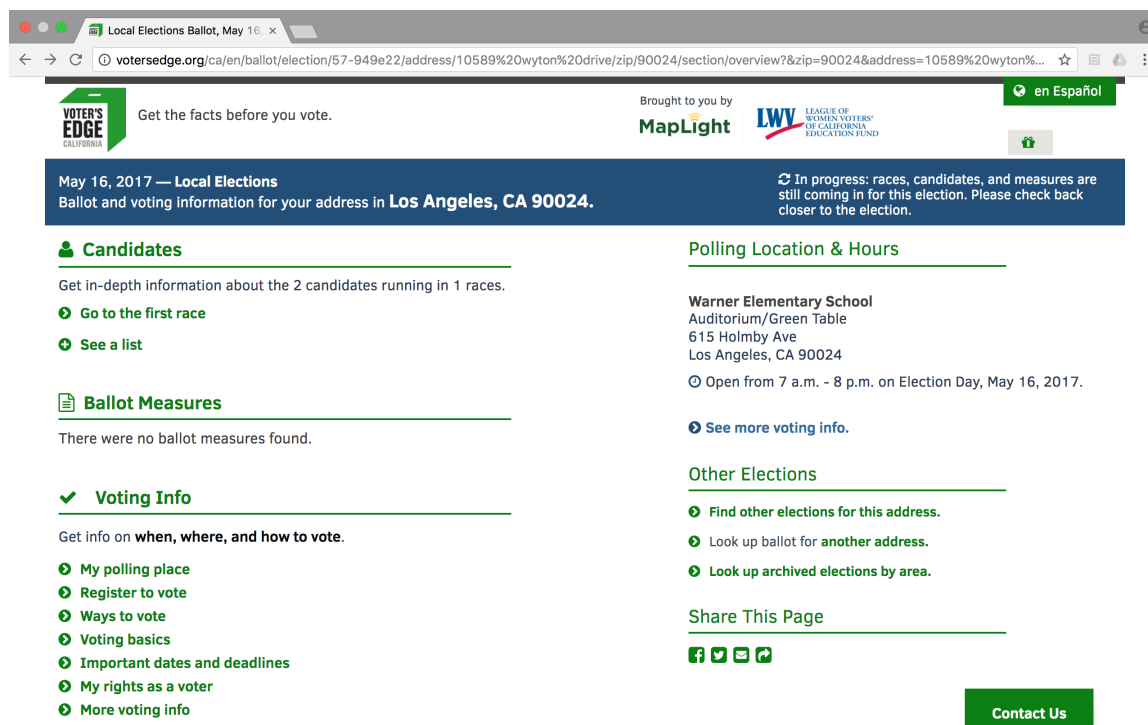

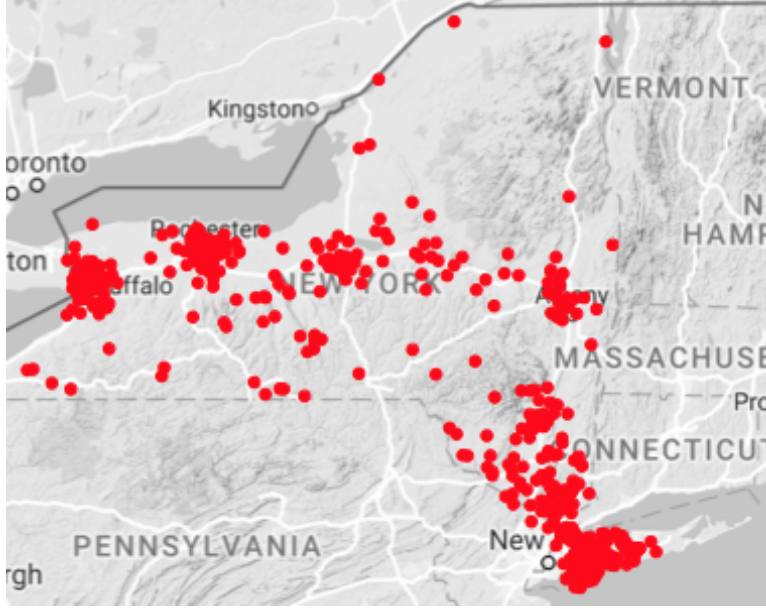Figure 2: Example Information for a Local Election in Los Angeles, CA

Figure 3: (Jittered) ZIP Codes of Sample Maplight Searches in New York State during 2017.

4 Search Data and Methods

MapLight provided us with a sample pilot list of New York state street addresses and ZIP codes entered into Voter's Edge. The data include searches prior to the state and local primary election in September 2016. We purchased the most recent version of the New York statewide voter file (recent as of March 2017), which contains registrant-specific information, including date of birth, gender, party enrollment, and previous voter turnout history. The turnout history spans from the 2000 general election up to and including the general election in November 2016. Using the street addresses searched via Voter's Edge and the addresses in the voter file, we identified the set of addresses that were searched. This address matching requires that the addresses in both files be formatted in the same way, a step that requires some text preprocessing (Denny and Spirling 2017). Of the 500 addresses in the search sample, we identified 493 ($\approx 99\%$) in the voter file.

Figure 3 shows the locations of the 500 addresses from New York state that Maplight provided us. The latitudes and longitudes have been jittered slightly. The searches mirror New York state's population centers in Erie, Monroe, Onondaga, Westchester, and Suffolk

counties.

After matching these searched addresses to the voter file, we have the name, age, party affiliation, and turnout history for the potential voters registered at each address. Identifying the particular individual or individuals who obtained election information for an address via Voter's Edge poses a number of challenges. Most fundamentally, Voter's Edge only has access to each searched street address and ZIP code, so we are unable to determine the unique individual at a given address that performed the Voter's Edge search. Additionally, we cannot know if some or all potential voters in a household used Voter's Edge, or shared the information they obtained with others in the household (or beyond). Finally, we find that most addresses searched in Voter's Edge have multiple matches in the voter file, representing a combination of multi-voter households and perhaps-out-of-date registrations that have not been purged.

To estimate the difference in turnout, we compare all registrants at searched addresses (the treated group, whom we call *searching registrants*) to a subset of the full set of registrants who did not search. We consider only registrants who were not purged from the rolls by 2016. Since addresses often have multiple registrants, our treated group includes 7574 searching registrants. We then exact-matched these searching registrants to a subset of the control group who are registered within a searched ZIP code, and who exactly-match a searching registrant on age, gender, party enrollment, and the number of times the registrant voted in prior national, state, and local elections since 2000 (Ho et al. 2011). This strict exact-matching trims the comparison set down from over 17 million registrants to 62,794 exact-matched controls. Comparing turnout in the two groups yields a difference of 0.005, or about $\frac{1}{2}$ of 1 percentage point of turnout.

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