

# TECHNOLOGY TO INVITE, INFORM, AND MODERNIZE: HOW PLATFORMS SUPPORT DEMOCRATIC PARTICIPATION

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## I. INTRODUCTION

Picture Election Day. It is probably a Tuesday (though not necessarily). Check-in tables in the high-school gymnasium sort voters by precinct, while plastic privacy screens fill the engine house of a nearby fire station. Some voters return ballots to drop boxes, while others mailed theirs back days ago.

Voting remains a manual process in an increasingly automated world. It is a tactile connection to democracy that goes beyond the enduringly popular “I voted” stickers. With a little squinting, one can imagine that the earliest voters would still recognize the process, in spite of the secret ballots and orderly quiet.

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Look longer, and you may begin to see the increasing role of technology in elections. Many of the voters in line registered online. Others saw a reminder on Facebook or searched for where to vote using Google. And the check-in process relies on tablet-based electronic pollbooks, which connect to the local voter registration system in real time. It may be many years before we vote from our phones, but we already live in a digital democracy.

Today, technology plays three critical roles in supporting voter participation. First, it can be the medium for inviting new voters into the process. From there, it can provide consistent, accessible election information to voters. Finally, it can modernize the voting process, providing a better user experience and creating positive feedback loops for participation. However, the same tools that provide these benefits can also serve to misinform, disinform, and suppress votes. By highlighting examples of positive voter engagement and taking lessons from what works, we can define how and where technology is used in elections to support voters and build a more robust democracy.

Lessons from these examples suggest three consistent requirements for any technology used in an electoral context. As a baseline, any technology serving voters must ensure accuracy, consistency, and accessibility. Where any of these principles are not taken into consideration, new tech runs risks of irrelevance, undermining civic trust, or even disenfranchising those it seeks to help. Where they inform technology and its usage, these requirements support a more modern, inclusive democracy.

## II. INVITING

“Candidates, public officials, and journalists operate in a narrow professional world that is largely of their own making and that is remote from the world of the public they serve.”

- Thomas Patterson, *The Vanishing Voter*<sup>1</sup>

If you want someone to do something, it helps to ask them. Inviting potential voters to register is especially important, and where technology scales personal outreach, it can bring new voters into the democratic process.

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<sup>1</sup> THOMAS E. PATTERSON, THE VANISHING VOTER: PUBLIC INVOLVEMENT IN AN AGE OF UNCERTAINTY 22 (2002).

Whether in comparison to other established democracies<sup>2</sup> or to our own historical elections,<sup>3</sup> modern American voter turnout levels are low. One group of non-voters, who Thomas Patterson labels “the disenchanteds”<sup>4</sup> and Kate Krontiris dubbed “interested bystanders,”<sup>5</sup> follow current events and take some interest in politics, but rarely take direct part. These individuals largely associate politics with conflict and negativity, and feel unwelcome in policy conversations. Left alone, they are unlikely to take part in elections—these bystanders need positive motivation to turn out.

In 2015, I conducted a series of research interviews into the voter registration experience. My questions were all about that process: were you online? On paper? At the Department of Motor Vehicles? And yet my notes surprised me: the answers were all about people. I heard answers that began with “My dad sat me down on my 18th birthday,” or “my high school guidance counselor passed out forms.” One interviewee told me that “I saw a canvasser on campus, and he looked sad, so I went over to register and cheer him up.”<sup>6</sup>

Through those interviews, I came to appreciate how much the act of invitation mattered to these voters. But for many potential voters, that invitation never comes: a 2016 Pew Charitable Trusts survey found that 62% of respondents were never asked to register to vote.<sup>7</sup>

Elections can feel exclusive and unfamiliar, and being invited in (especially by a trusted entity), is key. Technology can support these invitations at scale, helping both individuals and institutions champion voter participation within their communities.

One avenue where technology has supported inviting new voters to take part is social media. As early as 2012, Facebook offered its users the opportunity to register to vote. That year, the site offered users the ability to share their voter registration status as an event in their profile.

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<sup>2</sup> *Voter Turnout Database*, INT’L INST. FOR DEMOCRACY AND ELECTORAL ASSISTANCE, <https://www.idea.int/data-tools/data/voter-turnout> [<https://perma.cc/7A72-33ZL>].

<sup>3</sup> *National General Election VEP Turnout Rates, 1789-Present*, U.S. ELEC. PROJECT, <http://www.electproject.org/national-1789-present> [<https://perma.cc/4DDK-2WQ2>].

<sup>4</sup> PATTERSON, *supra* note 1, at 84 (“They are disenchanteds rather than alienated. They are not fuming mad at government, and unlike the alienated, they tend to believe that government has an interest in their opinions and their welfare. But they are disenchanteds with how politics are conducted”).

<sup>5</sup> Kate Krontiris et al., *Understanding America’s Interested Bystander: A Complicated Relationship with Civic Duty*, GOOGLE RESEARCH (June 2015), <https://research.google/pubs/pub44180/> [<https://perma.cc/9GXH-KLFB>].

<sup>6</sup> Kathryn Peters, *You’re Invited*, MEDIUM (Mar. 20, 2017), <https://medium.com/@katyetc/youre-invited-1568859f95ad> [<https://perma.cc/C5AY-4TKT>].

<sup>7</sup> *Why Are Millions of Citizens Not Registered to Vote?*, PEW RES. CENT. (June 21, 2017), <https://www.pewtrusts.org/en/research-and-analysis/issue-briefs/2017/06/why-are-millions-of-citizens-not-registered-to-vote> [<https://perma.cc/4SXQ-QAZV>].

In 2018, however, Facebook rolled out a feature that “lets people ask their friends to join them in registering to vote.”<sup>8</sup> Whereas in previous years, the reminder to register came from Facebook itself (with a social component displaying which of a user’s friends had shared their own registration status),<sup>9</sup> now individual users could create voter registration posts and add their own message to the request, then track how many friends they’d reached.

No breakdowns distinguish how many voters registered specifically via a friend’s post instead of the general Facebook promotion, but the company celebrated registering at least two million voters in 2018.<sup>10</sup>

On most social media platforms, users aren’t “friends” with the tool itself—with the notable exception of Snapchat. Due in part to the visual-messaging nature of the platform, Snapchat regularly distributes mass video messages to users to introduce new features and commemorate holidays. “Team Snapchat” is the first contact in any new user’s Snapchat account,<sup>11</sup> and the team members quickly become familiar faces.

For National Voter Registration Day (NVRD) 2018, users received a Snap from Team Snapchat. The brief video highlighted the speed and convenience of voter registration, featuring the team’s familiar faces.<sup>12</sup>

Snapchat reached more than 418,000 voters through its NVRD campaign. By comparison, a Taylor Swift PSA that ran at approximately the same time led to roughly 166,000 registrations.<sup>13</sup> In both cases, an online invitation was the nudge that many people needed to get registered or update their voter registration record.

Another space where technology has expanded voter engagement is higher education. The Higher Education Act of 1998 requires that colleges and

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<sup>8</sup> Sheryl Sandberg, *An Update on Our Civil Rights Audit*, FACEBOOK (Dec. 18, 2018), <https://about.fb.com/news/2018/12/civil-rights-audit/> [<https://perma.cc/3GES-TL84>].

<sup>9</sup> Josh Constine, *Facebook’s New Timeline Event Lets You Share You’re Registered to Vote, Links to Registration Sites*, TECHCRUNCH (Sept. 24, 2012, 4:53 PM), <https://techcrunch.com/2012/09/24/facebook-registered-to-vote/> [<https://perma.cc/3A3K-DVP9>].

<sup>10</sup> Sandberg, *supra* note 8.

<sup>11</sup> John Koetsier, *Snapchat Didn’t Send a Valentine’s Day Message to Everyone, and It’s a Thing (Seriously)*, FORBES (Feb. 14, 2020, 3:16 PM), <https://www.forbes.com/sites/johnkoetsier/2020/02/14/snapchat-didnt-send-a-valentines-day-message-to-everyone-and-its-a-thing-seriously/> [<https://perma.cc/AT5P-DTZM>].

<sup>12</sup> Jon Porter, *Snapchat is Letting Users Register to Vote from Its App*, THE VERGE, (Sept. 25, 2018), <https://www.theverge.com/2018/9/25/17899984/snapchat-voter-registration-2018-midterm-elections-turbovote> [<https://perma.cc/KU4S-QJDP>].

<sup>13</sup> Cecilia Kang, *Snapchat Helped Register Over 400,000 Voters*, N.Y. TIMES (Oct. 23, 2018), <https://www.nytimes.com/2018/10/23/technology/snapchat-voter-registration-midterms.html> [<https://perma.cc/N74U-SN6E>].

universities offer voter registration opportunities to students.<sup>14</sup> Many institutions go far above and beyond this requirement, embedding civic engagement and citizenship into their educational mission. On many campuses, this outreach remains manual work, whether through staffing registration tables in high-traffic areas, planning events, or coordinating student-led programs. Where institutions have incorporated technology into their engagement plans, these tactics have helped extend their efforts and reach even more of their student population.

For example, the Harvard university registrar's office integrated a voter registration step into their class registration process.<sup>15</sup> Each semester, every student planning their course schedule also sees a reminder to update their voter registration or subscribe to election reminders.<sup>16</sup> At many other institutions, Campus Labs, a vendor of student engagement software, offers a voter registration widget as an optional component in its platform.<sup>17</sup>

Initiatives like these make it possible for higher education administrators to invite every eligible student to register and vote—even across multiple campuses, commuter populations, or where other logistical factors make students difficult-to-reach with in-person events. Civic features don't replace traditional voter engagement programs, but do help ensure that administrators can reach every student and offer them the same information and support.

Low voter participation is a persistent and challenging problem in American democracy. Non-voters are disproportionately younger, lower-income, Hispanic and Asian-American, and their omission leaves democracy less representative than it could be.<sup>18</sup> Where technology can help to reach non-voters and invite them to take part, that simple request makes a big difference.

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<sup>14</sup> Higher Education Amendments of 1998 § 489, 20 U.S.C. § 1094(a)(23) (2020) (amending the Higher Education Act of 1965 § 487(a)(23)).

<sup>15</sup> *TurboVote*, HARV. FAC. OF ARTS AND SCI. REGISTRAR'S OFF., <https://registrar.fas.harvard.edu/turbovote> [<https://perma.cc/HA6S-DVRC>].

<sup>16</sup> *Harvard's Institute of Politics Launches Innovative Student Voter Registration Initiative*, HARV. INST. OF POLITICS (June 23, 2016), <https://iop.harvard.edu/about/newsletter-press-release/harvards-institute-politics-launches-innovative-student-voter> [<https://perma.cc/XKC6-ZNN2>].

<sup>17</sup> See Anjelica Smith, *TurboVote and Engage: How Partnerships Fuel Civic Participation*, DEMOCRACY WORKS (Aug. 23, 2018), <https://www.democracy.works/blog/2018/8/23/turbovote-and-engage-how-partnerships-fuel-civic-participation> [<https://perma.cc/D5X6-4YKV>].

<sup>18</sup> See *The Party of Nonvoters*, PEW RES. CENT. (Oct. 31, 2014), <https://www.people-press.org/2014/10/31/the-party-of-nonvoters-2/> [<https://perma.cc/29KH-2LMF>].

### III. INFORMING

Registering is only one step in the voting process. Once invited in, voters (especially new voters) often need help navigating what's on the ballot, when and where to vote, and what to bring. Unsurprisingly, most voters look for these answers online, and rely on technology platforms as publishers and distributors of basic election information. Initiatives that bring useful election information to voters online help to meet those needs.

These information needs are well-documented, thanks to research by the Center for Civic Design (CCD). CCD has published two voter journey maps illustrating some of the common paths that voters take from initial awareness to casting a ballot: a "happy path" and a "burdened path."<sup>19</sup> Voters on both paths seek out information about the candidates and issues, their voting options, and voting locations. And in their Field Guide to Ensuring Voter Intent, Vol. 7: Designing election department websites, CCD notes that the five most frequently-asked questions by voters are:

- What is on the ballot?
- How do I get an absentee ballot and when is it due?
- Where do I vote?
- Who is in office now?
- How do I register to vote?<sup>20</sup>

Official election websites play an important role in answering these questions, but cannot do so alone. In 2008, the Pew Center on the States published "Being Online is Not Enough," a report assessing the functionality and shortcomings of state election websites. Researchers considered how effectively election websites answered the following questions:

- Am I registered; or, how do I register?
- Where do I vote?
- What candidates and issues are on the ballot?

The researchers found that half of states offered an online voter registration status lookup tool. Two-thirds offered a polling-place lookup tool. The average usability rating scored a 58 out of 100, with a top score of only

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<sup>19</sup> Dana Chisnell, *The Epic Journey of American Voters*, MEDIUM (Mar. 22, 2017), <https://medium.com/civic-designing/the-epic-journey-of-american-voters-ed07bd0e6c57> [<https://perma.cc/WS3N-U6XW>].

<sup>20</sup> CYD HARRELL & ETHAN NEWBY, VOL. 7 DESIGNING ELECTION DEPARTMENT WEBSITES 16 (4th ed. 2018), <https://civicdesign.org/fieldguides/designing-election-department-websites/> [<https://perma.cc/HHP2-3JQ5>].

77.<sup>21</sup> In 2016, MIT's Election Data + Science Lab's Elections Performance Index (EPI) revisited these questions and found significant improvement, but there is still incomplete availability of voting information on official state sites across the United States.<sup>22</sup>

Alongside its findings on the availability of voting information on state election websites, "Being Online is Not Enough" announced the creation of the Voting Information Project (VIP), a collaboration between the Pew Charitable Trusts, Google, and state election officials to collect and standardize polling place data for broader online distribution.<sup>23</sup>

Since 2008, the Voting Information Project (VIP) has collected data from 44 states and the District of Columbia, and served hundreds of millions of API queries for polling place and ballot information. States provide data linking addresses to polling locations, early voting sites, and ballot information in a standard format.<sup>24</sup> The VIP team (since relocated to Democracy Works) provides quality assurance review, then publishes the data through Google's Civic Information API.<sup>25</sup>

By making official state data broadly available, VIP ensures that no matter where a would-be voter goes to seek out election information, they can find accurate, reliable data. The project team defines a standard data specification, provides ongoing technical support for election offices, and manages a community of developers who integrate the data into a wide variety of civic and political tools. Voters then encounter VIP data through candidate websites and outreach, on social media, or even through an SMS lookup via the GO-VOTE shortcode (46-8683).<sup>26</sup>

In addition to making official voting information more accessible, VIP has come to serve an important security role. As election officials grapple with increasingly complex threats, VIP's data is recognized as a valuable failsafe for state election websites, even where states publish this same information directly. During Wisconsin's 2020 spring primary, the MyVote Wisconsin tool encountered memory issues and was intermittently down for part of

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<sup>21</sup> *Being Online is Not Enough: State Elections Web Sites*, PEW RES. CENT. (Oct. 16, 2008), 8, 12, <https://www.pewtrusts.org/en/research-and-analysis/reports/2008/10/16/being-online-is-not-enough-state-elections-web-sites> [<https://perma.cc/GT5F-QPV3>].

<sup>22</sup> *See Elections Performance Index*, MIT ELEC. DATA AND SCI. LAB., <https://elections.mit.edu/> [<https://perma.cc/339T-MMGL>].

<sup>23</sup> *Being Online is Not Enough*, *supra* note 21, at 20.

<sup>24</sup> *Frequently Asked Questions*, VOTING INFORMATION PROJECT, <https://www.votinginfoproject.org/faq> [<https://perma.cc/D57J-HBDT>].

<sup>25</sup> *What is the Civic Information API?*, GOOGLE, <https://developers.google.com/civic-information> [<https://perma.cc/3G5G-HTFE>].

<sup>26</sup> *VIP Projects*, VOTING INFORMATION PROJECT, <https://www.votinginfoproject.org/projects> [<https://perma.cc/JD6N-KGM7>].

Election Day. The state promoted VIP's Get to the Polls tool as a backup option for voters to minimize the disruption.<sup>27</sup>

Beyond VIP, Google has made additional investments in informing voters through its search products. Before an election, searches for information about candidates or voting mechanics return highlighted results that use the company's Knowledge Panel and OneBox tools. These results address frequently-searched questions like "what to bring to vote?"<sup>28</sup>

As with VIP data, these highlighted results offer structured information, with sections like "who can vote" and "online voter registration." Unlike VIP, this data is standardized by a national non-profit partner, Democracy Works, rather than sourced directly from election officials. The data is not published via the Civic Information API for use in third-party tools, but instead appears only in Google's own search results.

This standardized formatting allows Google to ensure that every voter can find useful responses in "easily digestible formats... at the top of the Search results page."

For many voters, casting a ballot is a complicated process. Reliable information about both the choices at stake and the steps involved helps would-be voters follow through on their intention. Election officials' own digital presence provides a foundation that technology providers can amplify and supplement. Search platforms can prioritize clear, actionable information in results, while outreach technologies can bring information to voters proactively. These resources help move voters from a "burdened path" to a "happy path" as they navigate the many choices involved.

#### IV. MODERNIZING

Voter-facing campaigns to invite and inform are the most visible uses of technology, but the most important gains are found in modernizing election systems themselves. Improving technology for election administration can help register voters, increase participation, and offer voters more options for where and how they cast their ballots (e.g., early voting and voting by mail). These improvements to the voter experience help increase voter participation.

Basic measures such as database improvements can greatly improve voter registration rates. In 2002, the Help America Vote Act (HAVA) required that states establish centralized voter registration databases.<sup>29</sup> Prior to the

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<sup>27</sup> Wisconsin Elections (@WI\_Elections), TWITTER (Feb. 18, 2020, 10:17 AM), [https://twitter.com/WI\\_Elections/status/1229787147156238336](https://twitter.com/WI_Elections/status/1229787147156238336) [<https://perma.cc/CEJ4-HT2Y>].

<sup>28</sup> See Surfacing Key Civic Information in Search, GOOGLE, <https://elections.google/civics-in-search/> [<https://perma.cc/N8VM-J67H>].

<sup>29</sup> Help America Vote Act of 2002 § 303(a), 42 U.S.C. §§ 15483.



implementation of HAVA, voter registration records were maintained by a variety of state and local officials. Though a centralized database lacks the appeal of more cutting-edge technology, this mandate established a common technological baseline that supports more visible changes to the voting process. From this deceptively simple foundation, states have built better systems for maintaining voter registration lists, automated the voter registration process, simplified support for early voting and vote-center options, and improved accountability for voting by mail.

Despite their significant impact, building databases may escape attention as a major development in modernizing elections. The implementation and design of these tools is typically an administrative activity with few publicly-visible bells or whistles. But these updates to streamline voter registration processing have registered more new voters than any public outreach campaign,<sup>30</sup> and the additional security they provide reinforces public trust at a time when faith in elections and their outcomes is critical to maintain.

In January 2016, Oregon rolled out a change to its voter registration process. Where Oregonians were previously asked if they wanted to register to vote at the Department of Motor Vehicles (DMV), now they were automatically registered to vote. These new voters receive a postcard in the mail that they can fill out and return if they would like to opt out (or declare a party affiliation).<sup>31</sup> Since then, a total of nineteen states and D.C. have implemented similar systems to automate voter registration, whether at the DMV or other state agencies (in Alaska, the integration is with the state's Permanent Fund Dividend).<sup>32</sup>

This shift from an “opt-in” request to an “opt-out” relies on the electronic transfer of voter registration records from state agencies to election officials. While these integrations have not always launched smoothly,<sup>33</sup>

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<sup>30</sup> See generally U.S. ELECTION ASSISTANCE COMM'N, ELECTION ADMINISTRATION AND VOTING SURVEY: 2018 COMPREHENSIVE REPORT 18 (2018) [https://www.eac.gov/sites/default/files/eac\\_assets/1/6/2018\\_EAVS\\_Report.pdf](https://www.eac.gov/sites/default/files/eac_assets/1/6/2018_EAVS_Report.pdf) [<https://perma.cc/3DP3-WQ7N>].

<sup>31</sup> Niraj Chokshi, *Automatic Voter Registration a 'Success' in Oregon*, N.Y. TIMES (Dec. 2, 2016), <https://www.nytimes.com/2016/12/02/us/politics/oregon-voter-registration.html> [<https://perma.cc/H5QG-FTMV>].

<sup>32</sup> *Automatic Voter Registration*, NCSL, (Apr. 22, 2019), <https://www.ncsl.org/research/elections-and-campaigns/automatic-voter-registration.aspx> [<https://perma.cc/X7DM-P5PR>].

<sup>33</sup> John Myers, *One Voter, Two Registration Forms: Errors Reported in Rollout of California's 'Motor Voter' System*, L.A. TIMES (May 24, 2018, 12:05 AM), <https://www.latimes.com/politics/la-pol-ca-motor-voter-registrations-errors-20180524-story.html> [<https://perma.cc/5LC8-2QWK>].

automatic voter registration (AVR) represents an important advance in supporting higher turnout and broader voter participation.

The federal Election Assistance Commission's 2018 Election Administration and Voting Survey (EAVS) found "an increase of almost 10 million in the number of registration applications received by states via the DMV for the 2018 general elections compared with 2016, and the percentage of the total registrations received by the DMV (which usually processes automatic registrations) has increased by 11 percentage points compared to 2016."<sup>34</sup> Oregon alone reported a 20-point increase in the share of voter registrations processed through the DMV between 2016 and 2018, while in Alaska, just under 60 percent of all voter registrations processed in the 2018 election cycle came through the integration with the Permanent Fund Dividend.<sup>35</sup> A report by the Brennan Center estimated that AVR increased the number of registrants in implementing by jurisdictions by rates of 9 percent - 94 percent.<sup>36</sup>

Given the recent implementation of many state AVR processes, their impact on turnout is not yet fully understood. An early study based on Oregon's 2016 turnout found that 43.6 percent of automatically-registered voters voted, as compared to 84.1 percent of traditionally-registered voters. Despite this gap, automatically-registered voters made up 4.7 percent of the state's voters in the 2016 election, marking a significant increase in participation.<sup>37</sup>

Other technologies improve the accuracy and quality of voter registration records. The Electronic Registration Information Center (ERIC) is a nonprofit organization that improves the accuracy of state voter files and increases voter registration rates. By comparing voter registration records from its thirty member states and the District of Columbia and the Social Security Death Master list, ERIC provides reports on voters who have likely moved, died, or changed in eligibility status, and identifies unregistered eligible citizens within the population.<sup>38</sup> Member states commit to using these reports to conduct proactive outreach based on these reports, and give those

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<sup>34</sup> U.S. ELECTION ASSISTANCE COMM'N, *supra* note 30, at 47.

<sup>35</sup> *Id.*

<sup>36</sup> Kevin Morris and Peter Dunphy, *AVR Impact on State Voter Registration*, BRENNAN CENTER FOR JUSTICE 1 (Apr. 11, 2019), <https://www.brennancenter.org/our-work/research-reports/avr-impact-state-voter-registration> [<https://perma.cc/ZJ3L-DD4T>].

<sup>37</sup> Rob Griffin et al., *Who Votes with Automatic Voter Registration? Impact Analysis of Oregon's First-in-the-Nation Program*, CENTER FOR AM. PROGRESS (June 7, 2017, 8:56 AM), <https://www.americanprogress.org/issues/democracy/reports/2017/06/07/433677/votes-automatic-voter-registration/> [<https://perma.cc/7TEC-BMBD>].

<sup>38</sup> Electronic Registration Information Center, *ERIC Introduction*, YOUTUBE (Mar. 11, 2015), <https://www.youtube.com/watch?v=O8ISoeO1hjw> [<https://perma.cc/A4UC-D9SP>].

residents additional opportunities to register to vote or update their voter registration.<sup>39</sup>

Since its inception in 2012, ERIC identified more than 34 million Americans who were potentially eligible to vote but unregistered.<sup>40</sup> Each of those people received a state contact (typically a postcard) offering them an opportunity to register. A 2013 study in Washington State found that a message of ease and convenience led to a 5 percent registration rate among recipients, at a cost (in 2015) of 23 cents per postcard sent.<sup>41</sup> Other states have seen response rates as high as 20 percent.<sup>42</sup>

In that same period, ERIC identified millions of inaccurate individual voter registrations to member states. As with eligible-but-unregistered records, these voters receive outreach from state election officials with the opportunity to update their records or confirm that they were no longer eligible to vote in that state.

In 2016, Colorado—a founding member of ERIC—had the highest percentage of eligible, registered voters in the country. In speaking with the *New York Times*, Judd Choate, Colorado’s Director of Elections, credited ERIC as a big part of the state’s high registration rate. “ERIC has been a game changer in elections for those of us in it.”<sup>43</sup>

New election technologies also support a wider range of voting methods, including early and mail voting. These offerings give voters greater flexibility in how to cast their ballots. In the 2018 midterm election, 25.8% of voters cast their votes by mail, a fraction that has trended consistently upwards over the past 30 years.<sup>44</sup> Many states have implemented election laws that allow any registered voter to cast their ballot by mail.<sup>45</sup>

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<sup>39</sup> ELECTRONIC REGISTRATION INFORMATION CENTER BYLAWS, Exhibit A, Section 5(a) (Feb 3, 2020), [https://ericstates.org/wp-content/uploads/2020/02/ERIC\\_Bylaws\\_01-2020.pdf](https://ericstates.org/wp-content/uploads/2020/02/ERIC_Bylaws_01-2020.pdf) [<https://perma.cc/53CH-LXPG>].

<sup>40</sup> ELECTRONIC REGISTRATION INFORMATION CENTER, *ERIC At Work* (2019), <https://ericstates.org/statistics/> [<https://perma.cc/AS5T-RY5H>].

<sup>41</sup> Christopher B. Mann & Lindsay Pryor, *2013 ERIC Voter Registration Outreach in Washington State*, WA (2014), <https://www.sos.wa.gov/assets/elections/2013-eric-voter-registration-in-washington-state-final-3-20-2014.pdf> [<https://perma.cc/GJ6Q-8CPK>].

<sup>42</sup> Steve Lohr, *Another Use for A.I.: Finding Millions of Unregistered Voters*, N.Y. TIMES (Nov. 5, 2018), <https://www.nytimes.com/2018/11/05/technology/unregistered-voter-rolls.html> [<https://perma.cc/636T-X8JR>].

<sup>43</sup> *Id.*

<sup>44</sup> U.S. ELECTION ASSISTANCE COMM’N, *supra* note 30, at 11.

<sup>45</sup> *Voting Outside the Polling Place: Absentee, All-Mail, and other Voting at Home Options*, NCSL (Apr. 14, 2020), <https://www.ncsl.org/research/elections-and-campaigns/absentee-and-early-voting.aspx#do%20not> [<https://perma.cc/DG6Q-6G7C>].

Mail voting options have been demonstrated to increase turnout.<sup>46</sup> It also offers voters additional choice and convenience and reduces the potential for long lines and other Election Day problems at polling places. New technology tools improve the security and trustworthiness of mail ballots, making them a viable choice for increasing numbers of voters.

In reviewing EAVS data from the 2008 presidential election, Charles Stewart III of MIT suggested that as many as 7.6 million voters dropped out of the voting “pipeline” between requesting a mail ballot and having it counted, and called for increased attention to the process steps where those losses might be happening.<sup>47</sup> That year, respondents from the two all-mail election states of Oregon and Washington reported below-average confidence that their votes were counted—and their confidence ratings corresponded with their support or opposition for mail-based elections.<sup>48</sup>

As rates of voting by mail continue to increase, maintaining voter confidence is a critical concern in ensuring a healthy democracy. Election officials are increasingly offering ballot-tracking tools that allow voters to verify that their votes were received and counted.

Three states (Colorado, Oregon, and Washington) conduct elections primarily by mail, sending every voter a ballot at the start of the election cycle, while two others (California and Utah) allow counties to conduct all-mail elections as well.<sup>49</sup> These states each provide tools where voters can look up the status of their ballot.<sup>50</sup> Several also track ballots through the postal service, using USPS Intelligent Mail barcode scan data to provide more detailed

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<sup>46</sup> *Voting by Mail and Absentee Voting*, MIT ELEC. DATA + SCI. LAB, <https://electionlab.mit.edu/research/voting-mail-and-absentee-voting> [https://perma.cc/Z2EK-GRMG].

<sup>47</sup> Charles Stewart III, *Losing Votes by Mail*, 13 N.Y.U. J. LEGIS. & PUB. POL’Y 573 (2010), <https://www.nyu.jp.org/wp-content/uploads/2012/11/Charles-Stewart-III-Losing-Votes-by-Mail.pdf> [https://perma.cc/JEC8-R98A].

<sup>48</sup> *Id.* at 598.

<sup>49</sup> Hawaii will switch to an all-mail election system in 2020. Nancy Lauer, *Hawaii Opts for Voting by Mail*, U.S. NEWS (June 26, 2019), <https://www.usnews.com/news/best-states/articles/2019-06-26/all-mail-balloting-becomes-law-in-hawaii> [https://perma.cc/4VH4-7SS9].

<sup>50</sup> State ballot tracking tools vary significantly in both design and function. *See generally Where’s My Ballot*, CA SEC’Y OF STATE, <https://www.sos.ca.gov/elections/ballot-status/wheres-my-ballot/> [https://perma.cc/6WWD-CUFV]; *Go Vote Colorado*, CO SEC’Y OF STATE, <https://www.sos.state.co.us/voter/pages/pub/home.xhtml> [https://perma.cc/SY7M-NFEZ]; *My Vote*, OR SEC’Y OF STATE, <https://sos.oregon.gov/voting/pages/myvote.aspx> [https://perma.cc/5X7R-TVBU]; *Track My Ballot*, UT, <https://votesearch.utah.gov/voter-search/search/search-by-voter/track-mail-ballot> [https://perma.cc/GUC3-M3PR]; *Register to Vote*, VOTE WA, <https://voter.votewa.gov/WhereToVote.aspx> [https://perma.cc/K6S2-DHCJ].

information about the ballot's location. In addition to online lookup tools, some states also provide email or text messages with ballot tracking updates.

Ballot tracking technology provides multiple benefits: it offers election officials the opportunity to intervene and correct problems in the postal system, provides voters with clear confirmation that their ballots were counted, and generates data on ballot-mailing patterns that allow election officials to review and improve ballot-mailing procedures on an ongoing basis.

Another 22% of voters cast their ballots in-person before Election Day.<sup>51</sup> Like mail voting, early voting is an increasingly popular choice, even more so in presidential election years. Though early voting has not been demonstrated to increase turnout, it can reduce the risk of Election Day issues by reducing stress on individual polling places.<sup>52</sup>

Like mail voting, early voting is increasingly popular with voters as more states offer the option. Though it is possible to administer early voting without technological support, tools like digital e-pollbooks that can sync voter turnout records with a central voter registration list in (or near to) real-time and on-demand ballot printing streamline the process in ways that have reduced the cost and complexity of setting up early voting centers for many states, and given voters additional convenience in deciding when and how to cast their ballots.

In these cases, technology offers election administrators resiliency in the face of changing voter needs. As public health considerations push many states to expand mail voting significantly in 2020, states with robust automation and well-maintained voter registration records are positioned to transition more smoothly. The systems they have built are less visible to the public, but have already had significant impact on rates of both registration and participation. In a moment of disruption, they continue to support election officials' changing needs. Core election technologies are critical to supporting robust voter participation.

## V. GUIDING PRINCIPLES

When discussing how technology can support voter turnout and civic engagement, “just add software” is a dangerous approach.<sup>53</sup> Looking to

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<sup>51</sup> U.S. ELECTION ASSISTANCE COMM'N, *supra* note 30, at 11.

<sup>52</sup> Nathaniel Rakich, *Early-Voting Laws Probably Don't Boost Turnout*, FIVE THIRTY EIGHT (Jan. 30, 2019), <https://fivethirtyeight.com/features/early-voting-laws-probably-dont-boost-turnout/> [<https://perma.cc/8RJH-6H29>].

<sup>53</sup> See generally Andrew Westrope, *Detailed Audit of Voatz's Voting App Confirms Security Flaws*, GOVTECH BIZ, (Mar. 18, 2020), <https://www.govtech.com/biz/Detailed-Audit-of-Voatz-Voting-App-Confirms-Security-Flaws.html> [<https://perma.cc/JQU3-SDYE>] (documenting the extensive security concerns in Voatz, a mobile application that offers an online voting experience).

examples of successful uses of technology in inviting, informing, and modernizing voting, what common lessons do these cases offer?

When designing tools that support voters and the voting experience, three necessary (but not sufficient) requirements are *accuracy*, *consistency*, and *accessibility*. Where any of these principles are not taken into consideration, new tech runs risks of irrelevance, undermining civic trust, or even disenfranchising those it seeks to help.

Of these three principles, accuracy is both the most important and the clearest to evaluate. The principle of accuracy requires that the information offered by any tool or organization must first and foremost be correct. Democratic participation requires a wide-ranging dialogue, including discussion of information that may be controversial or in flux. As a subset of this conversation, information about how to vote is comparatively settled. Though an individual voter may not know their options or every step of the process, the answers to their questions are specific and verifiable.

However, because election processes vary so much by state (and in some cases, by county), accuracy can pose a significant challenge for any nationwide effort. As states offer additional means of registering and voting, those new options often add complexity as well. At least five states have different deadlines for registering to vote depending on whether the registration is submitted online or by mail.<sup>54</sup> Some states set consistent early voting periods, while others allow local jurisdictions to set their own.<sup>55</sup>

When done right, technology tools can help by tracking these state and local differences, geocoding voters, and ensuring that locally-accurate information gets matched to the people who need it. And yet, errors abound. In 2016, two major voter registration sites listed an incorrect phone number for the national election protection hotline.<sup>56</sup> In 2018, Vox re-issued a registration deadline chart multiple times with corrections, even as outdated versions ricocheted around Twitter.<sup>57</sup> Even official election websites occasionally list outdated, contradictory, or confusing instructions.

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<sup>54</sup> *Voter Registration Deadlines*, NAT'L CONF. ST. LEGISLATURES (Nov. 1, 2019), <https://www.ncsl.org/research/elections-and-campaigns/voter-registration-deadlines.aspx> [<https://perma.cc/8BP6-W4L9>].

<sup>55</sup> *State Laws Governing Early Voting*, NAT'L CONF. ST. LEGISLATURES (Aug. 2, 2019), <https://www.ncsl.org/research/elections-and-campaigns/early-voting-in-state-elections.aspx> [<https://perma.cc/FB7S-TXMS>].

<sup>56</sup> @govotepz, TWITTER (Sept. 8, 2016, 2:09 PM), <https://twitter.com/tianaej/status/773991749236686848> [<https://perma.cc/6RT5-QLBA>].

<sup>57</sup> @voxdotcom, INSTAGRAM, <https://www.instagram.com/p/BowgmkmgrQf/> [<https://perma.cc/7QLQ-RNSN>] (deadline graphic on Instagram included the caption "CORRECTION: A previous version of this graphic (it's blue) contained incorrect or outdated information on the voter deadlines for Connecticut, Louisiana, and Utah. Florida and North

Where voters find accurate information, simply presented, they are more able to vote. Where design flaws or factual errors detract from this goal, technology can cause harm by distributing errors widely or contributing to voter confusion.

While accuracy ensures that a tool or organization serving voters is correct, the value of consistency recognizes that voter-facing messages must also work to reinforce any information that voters already have from other sources and to build confidence from that familiarity. Any technology used to invite or inform can increase trust through repetition or undermine it by contradicting (or appearing to contradict) other sources.

A potential voter setting out to learn about an election and deciding whether or not to take part will ask many questions. Especially for new voters, the path to casting a ballot is rarely straight. A voter on the Center for Civic Design's sample "burdened path" lacks information about their options for voting or may discover some options too late to take advantage of them.<sup>58</sup> They may worry about voter ID, even if their state does not require one. They move and need to update their voter registration just before the election. In this search for information, they may consult a wide variety of resources, from conversation to Internet search tools to social media engagement, to answer these questions.

In doing so, those voters will build up an understanding of the voting process and a corresponding expectation based on many separate inputs. Marsha Bates's berry-picking model of search describes a discovery process in general terms: a person may begin with one question ("so, what is this election about?") and, based on the first pieces of useful information found, begin to ask new questions that refine and build on the initial question ("how do these choices affect me? Do I care?")<sup>59</sup>

Technologies for voter engagement can fall short of offering consistency in two ways: first, where they rely on jargon, and second, where they neglect to account for local variation. Official government materials can fall prey to jargon—long familiarity with these terms makes it difficult to remember that even terms like "early voting" are not immediately understandable to voters. One state offers voters requesting an absentee ballot the option to declare that:

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Carolina have also adjusted their deadlines due to recent weather conditions. It has been corrected with confirmation from their state election offices. Thanks to our readers for helping point those out—and be sure to check with your local election office if you have questions, as dates are subject to change").

<sup>58</sup> *The Epic Journey of American Voters*, CTR. FOR CIVIC DESIGN (Mar. 22, 2017), <https://civicdesign.org/the-epic-journey-of-american-voters/> [<https://perma.cc/G2X6-QL6B>].

<sup>59</sup> See generally M.J. Bates, *The Design of Browsing and Berry-picking Techniques for the Online Search Interface*, 13 ONLINE REV. 407 (1989).

“I am requesting a ballot for the presidential primary election and I may be absent on the day of the election from the city, town, or unincorporated place where I am domiciled, but the date of the election has not been announced. I understand that I may only make such a request 14 days after the filing period for candidates has closed, and that if I will not be absent on the date of the election I am not eligible to vote by absentee ballot.”<sup>60</sup>

Even though there may be a legal requirement that mandates this language, this jargon makes it unlikely that any voter will choose this option.

Finally, any technology intended to support voter engagement and turnout must be accessible: it serves real people with a wide variety of needs. In this context, simplifying or omitting edge cases<sup>61</sup> can exclude entire populations from participating in democracy. Where technologies simplify voting or provide a warm invitation only to groups who are already well-represented, they undermine the goal of robust participation.

Accessibility in a voting context includes a wide variety of considerations, from designing for low-vision and blind voters using screen-readers, to using clear language for voters with cognitive disabilities, to including support for multiple languages or publishing information on enfranchisement for returning citizens. Technology may need to address, or at least consider, transportation options for getting to the polls, how to procure voter IDs, or untangling residency requirements for students or people with unstable housing. Voters have many specific needs that affect their ability to take part.<sup>62</sup>

Accessibility also means careful attention to design and presentation that can make the complexity of our election system into a process voters feel confident navigating. For example, the research and design phase of Los Angeles County’s “Voting Solutions for All People” project made “easy and accessible” one of the four guiding principles in the system’s approach to serving voters.<sup>63</sup> The resulting prototypes include adjustable screens, multiple

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<sup>60</sup> *Election Forms*, NH SEC’Y OF STATE, <https://sos.nh.gov/ElecForms2.aspx> [<https://perma.cc/P3VJ-GNDL>].

<sup>61</sup> In software development, these refer to less-common uses or user needs. Work to address edge cases is often less-prioritized than work that serves a larger number of anticipated users.

<sup>62</sup> Matt Vasilogambros, *How Voters with Disabilities are Blocked from the Ballot Box*, *Pew Charitable Trusts Stateline*, PEW CHARITABLE TR. (Feb. 1, 2018), <https://www.pewtrusts.org/en/research-and-analysis/blogs/stateline/2018/02/01/how-voters-with-disabilities-are-blocked-from-the-ballot-box> [<https://perma.cc/6FPF-5XFY>].

<sup>63</sup> *Principles*, LOS ANGELES COUNTY REGISTRAR-RECORDER/COUNTY CLERK: VOTING SOLUTIONS FOR ALL PEOPLE, <https://vsap.lavote.net/principles/#1464904796160-2d2c8b63-cccc> [<https://perma.cc/E84G-LLG5>].



language support, and other accessibility features as core elements of the voting machine's design.<sup>64</sup> These voting machines are not yet in use in Los Angeles County, but they model how accessibility planning can support all voters.

In elections, good design goes a long way. No one technology may serve every one of those voters' needs, but tools that do not meaningfully address any of them can suppress votes.

## VI. CONCLUSION

This November, Election Day may hardly resemble the school-gymnasium scene many of us are accustomed to. In states like Colorado, it already does not. Voters register on state websites, seek out ballot and deadline information online, receive their ballots by mail, and track their return via text message. Where new technologies have allowed election administrators to offer voters greater choice and convenience, those same measures now support a robust election even in a time of social distancing.

How we take part in this election may feel new for many American voters, but it builds on existing technology. When Facebook and Snapchat ask their users to request mail ballots, and Google results include step-by-step instructions, they'll be using existing systems to distribute new and changing information. If any states choose to mail every voter a ballot, that will be supported by their centralized databases and list-maintenance work through ERIC.

And if Election Day looks like putting on the "I voted" sticker that came with your ballot in the mail two weeks prior and publishing a selfie from the quiet of your home, you'll simply be joining the future of voting that technology has long been building—just accelerated a bit.

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<sup>64</sup> *Concepts*, LOS ANGELES COUNTY REGISTRAR-RECORDER/COUNTY CLERK: VOTING SOLUTIONS FOR ALL PEOPLE, <https://vsap.lavote.net/design-concepts-2/> [<https://perma.cc/DWZ2-DY4F>].