

Ballot Tracking Use in the United States: A Multi-State Analysis

Evolving Election Administration Landscape Project
Combined Technical Report for MEDSL | Final

March 2024

Mindy Romero, PhD | Director, Center of Inclusive Democracy (CID), PI
Research Assistant Professor | Sol Price School, University of Southern California

Paul Gronke, PhD | Director, Elections & Voting Information Center (EVIC), Co-PI
Professor of Political Science | Reed College | Portland, Oregon

Anna Meier | Research Associate, Center of Inclusive Democracy (CID)
Research Associate | Sol Price School | University of Southern California

Michelle M. Shafer | Senior Program Advisor, Elections & Voting Information Center (EVIC)
Reed College | Portland, Oregon

Abstract

Vote-by-Mail (VBM) ballot locator and notification systems, such as [BallotTrax](#), are intended to inform voters of the status of their VBM ballots regarding when they are mailed, received, and either accepted or rejected. Voter advocacy groups and election officials alike have been seeking effective ways to track voters' ballots to ensure they are successfully received and counted during local, state, and federal elections. These same actors hope that ballot tracking will help strengthen voter trust and confidence in the integrity of the ballot counting process and legitimacy of election outcomes. Ballot tracking systems offer individual voters a chance to track the path of their ballot, and correct issues such as cure challenged signatures, prior to election deadlines. The [Center for Inclusive Democracy \(CID\)](#) at the [Sol Price School](#) of the [University of Southern California \(USC\)](#) and the [Elections & Voting Information Center \(EVIC\)](#) at [Reed College](#) collaborated to explore ballot tracking use, local election official (LEO) communication related to ballot tracking options, how ballot tracking impacts ballot rejection, and the impact of ballot tracking on voters' information levels and attitudes about election integrity. Using a combination of quantitative and qualitative methods, this research seeks to inform efforts to combat misinformation about the integrity of voting by mail and aims to strengthen democracy in the United States.

Grant Amount

\$165,000

Accomplishments

Our goal at CID/EVIC in undertaking this research project was to collect comprehensive information on voter usage rates of ballot tracking for voters in multiple states; track communications and education practices; and conduct a public opinion survey in order to address the following four research questions:

1. What are the patterns of and reasons for adoption and non-adoption of ballot tracking?
2. What is the effectiveness of LEO communication and education in encouraging widespread and equitable usage by voters?
3. What is the impact of ballot tracking systems on voter information and trust?
4. What is the occurrence of:
 - mail ballot transmission and return?
 - address updating?
 - ballot rejections?
 - ballot curing?
 - other points of ballot flow or movement in the process of by-mail voting?

The CID/EVIC team conducted this study in three states (California, Colorado, and Georgia), which are early adopters of universal ballot delivery voting systems and voters in California and Colorado experience widespread use of vote centers.

The voter file analysis of BallotTrax users in California, Colorado, and Georgia is complete and the applicable research questions have been examined for variation by demographic and geographic subgroup.

Data acquisition challenges, changes in the technology providers who work in ballot tracking, and unexpected changes to the use of mail balloting in some states limited our ability to extend the survey to additional states. At the time, our research team was able to pivot and acquire confidential BallotTrax user data through direct data sharing agreements in our three study states.

As referenced earlier, the CID/EVIC team conducted statewide opinion surveys in these three states (California, Colorado, and Georgia) selected after the analysis of multi-state ballot tracking data. With our survey administration partners at YouGov, we compared views of election integrity and conduct between matched samples of voters who cast a ballot in November 2022 and those voters who use and who do not use ballot tracking (in particular, low by-mail voting rates and comparatively low ballot tracking rates in Georgia in 2022 made survey sampling infeasible, so we chose to focus our efforts on a more in-depth survey effort in two states). The surveys were completed in late 2023.

Additionally, the CID/EVIC team was unable to conduct analysis on the effectiveness of LEO communication and education in encouraging widespread and equitable usage by voters.

Major Phases of the Project

Following are the major milestones of this Ballot Tracking project:

Data Collection and Methods Determination

The team analyzed individual voter records and BallotTrax data to gather data on variations in voting behavior between those who did and did not use ballot tracking systems in California, Colorado, and Georgia during the 2022 general election. Voter files and BallotTrax data were supplied by the California, Colorado, and Georgia Secretary of State offices. The analysis is broken out by race, ethnicity, age, and party affiliation.

Survey Administration

International research data and analytics group [YouGov](#) administered opinion surveys of 2022 general voters in three states that currently offer ballot tracking - California, Colorado, and Georgia – in order to understand the informational and attitudinal impacts of the use of ballot tracking. Our surveys included framing experiments to help local election officials understand what kind of appeals would be more likely to encourage more citizens to sign up for ballot tracking, as well as testing how much information is understood about the systems by both VBM users who have ballot tracking available to them and those who have not signed up for ballot tracking.

Survey Methodology

We attempted to keep the survey identical in all three states; however, the voting conditions in California and Colorado are more similar than in Georgia. Voters in Colorado vote almost exclusively by mail, as do the majority of voters in California. In Georgia, voters must request a vote by mail ballot and provide a reason or “excuse” to the state, so in the Georgia survey, we asked voters how they voted in 2022, which is a deviation from the other two surveys. The survey was conducted by YouGov and was in the field from October 24 through November 24, 2023. We had a total of 1,100 respondents in California, 500 respondents in Colorado, and 650 respondents in Georgia. Table 1 shows the respondent breakdown by party ID.

Data Limitations

Voter files supplied by California, Colorado, and Georgia for this report differed in terms of data available. Both Colorado and Georgia voter files were simpler than the available California data, restricting which analyses that could be completed for each state. While this report was able to examine BallotTrax use, registered voter turnout, and voting method for all three states, vote-by-mail rejection rate analysis was limited to California and Colorado. Additionally, cured ballot data was limited to only BallotTrax users in California and we were unable to examine cured ballot rates among non-BallotTrax users in California and all voters in Colorado and Georgia.

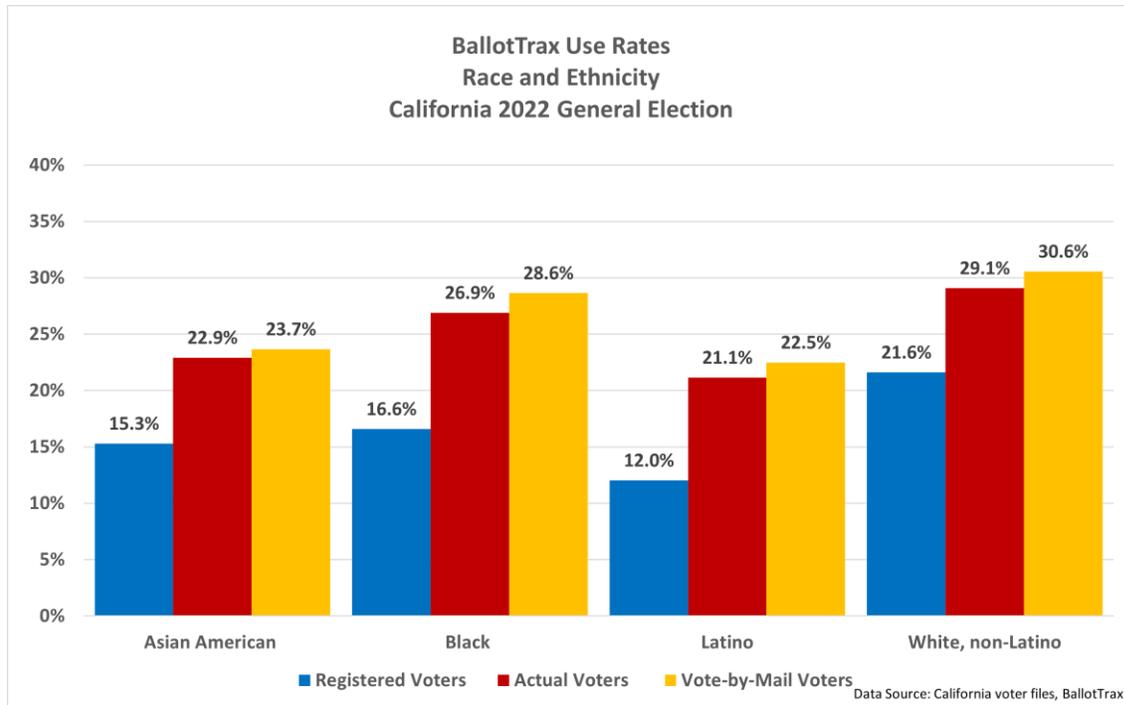
Although originally planned to be included in this analysis, Ballot Scout, another ballot tracking tool, could not supply data for this report and comparisons between the two ballot tracking tools could not be completed.

BallotTrax and Voter Records Data: Major Findings

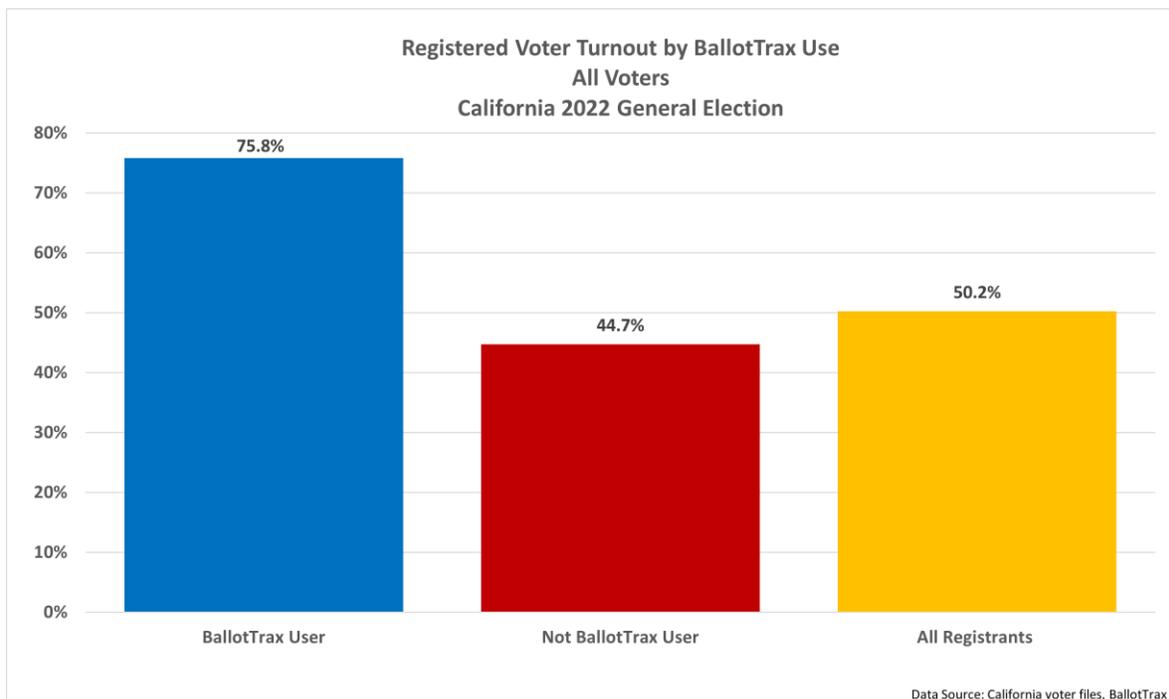
The following sections detail key findings in California, Colorado, and Georgia. The following analysis examines correlation between voting behavior and BallotTrax use. Many factors influence turnout, vote-by-mail rejection rates, and voting methods. Our analysis examines only the descriptive relationship between BallotTrax use and voting behaviors and does not demonstrate causality.

In this report, we examine differences across racial and ethnic groups. In an upcoming, more detailed, report looking at BallotTrax use in California, Colorado, and Georgia, differences across age groups will also be examined.

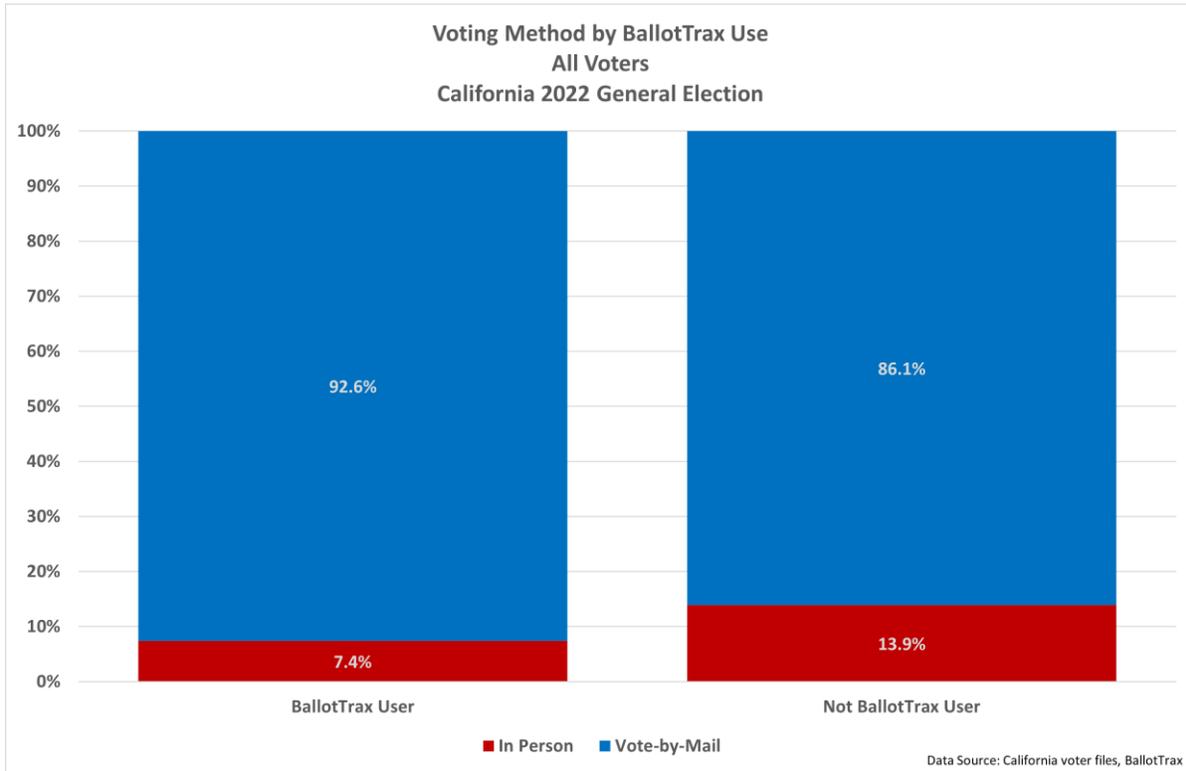
California



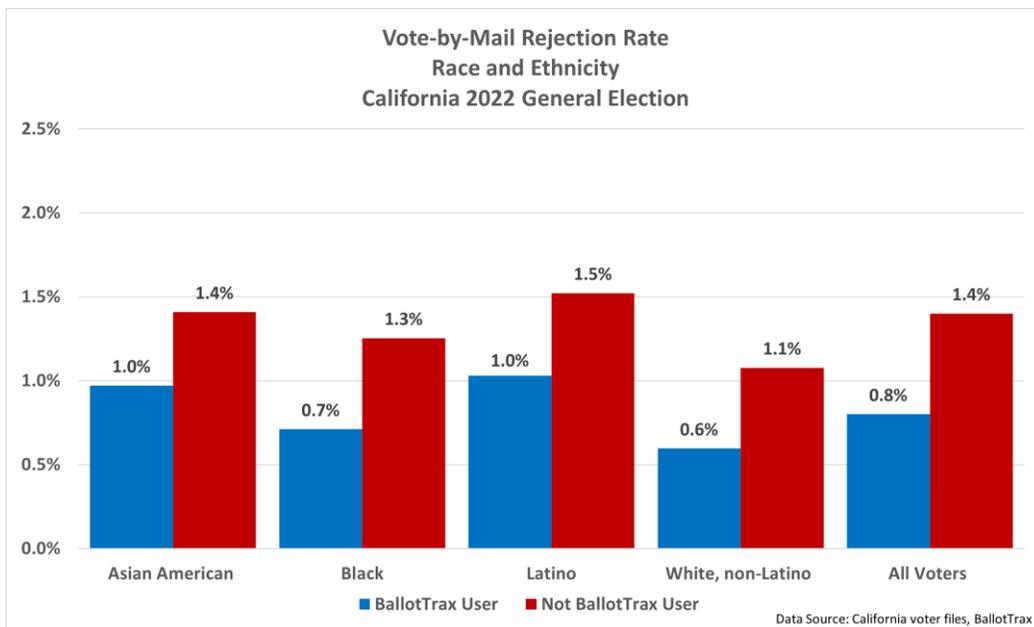
Latino voters in California used BallotTrax at the lowest rates in the 2022 general election across all racial and ethnic groups, followed closely by Asian-American voters. While Black registered voters were signed up for the tool at notably lower rates than White, non-Latino registered voters, Black VBM voters used the tool at similar rates to white, non-Latino VBM voters.



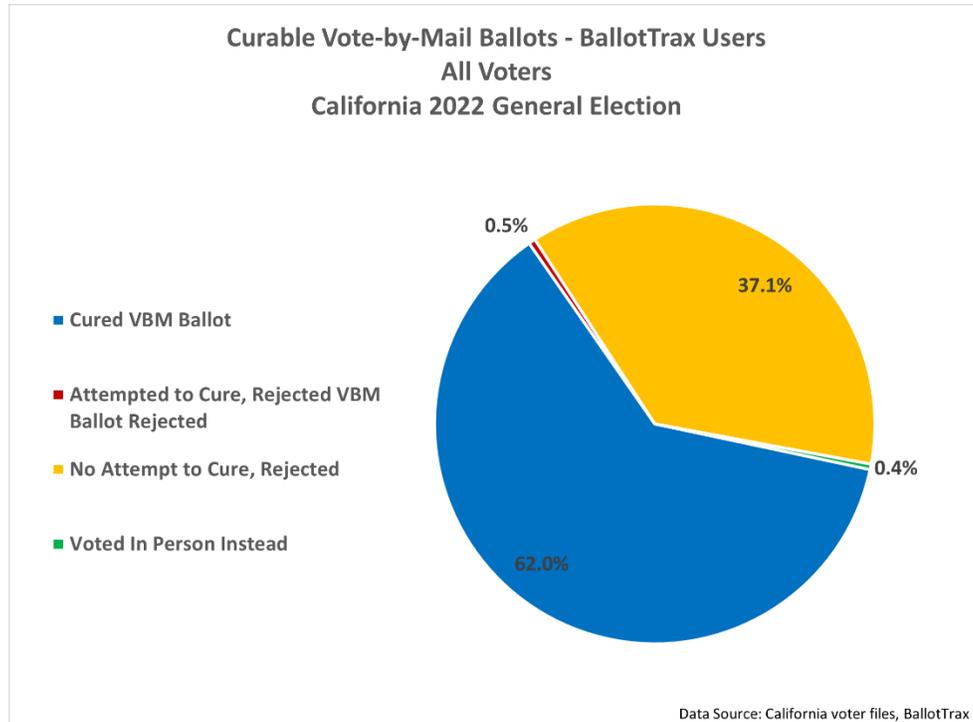
Over three-quarters of BallotTrax users in California cast a ballot in the 2022 general election, compared to nearly 45% of non-BallotTrax users. Californians using BallotTrax had a registered voter turnout rate 50% higher than the general population.



While the vast majority of voters in California used vote-by-mail ballots in the 2022 general election, VBM ballot use was even higher among BallotTrax users than those not using the tool. Over 92% of BallotTrax users used VBM ballots, compared to a little over 86% of non-BallotTrax users.



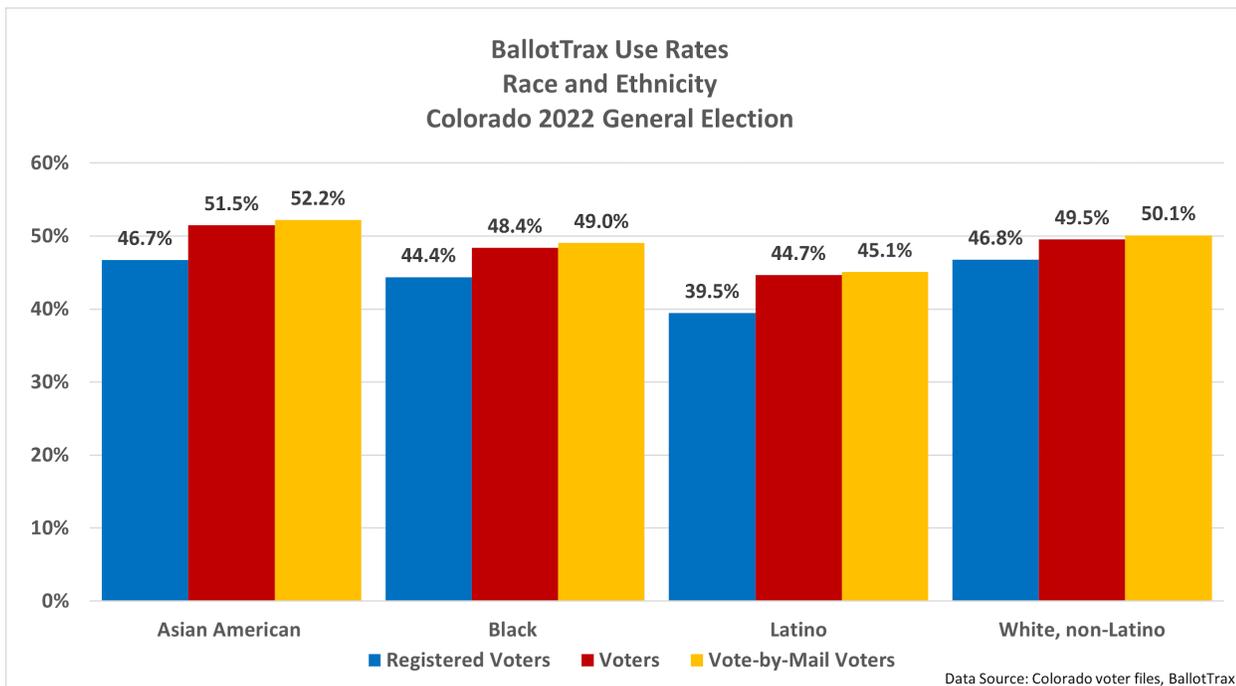
Vote-by-mail rejection rates were lower among BallotTrax users than among non-BallotTrax users. The share of VBM ballots cast that were ultimately rejected was more than fifty percent higher among non-BallotTrax users (1.4%) than among those tracking their ballots (0.8%). This trend continued across all racial and ethnic groups.



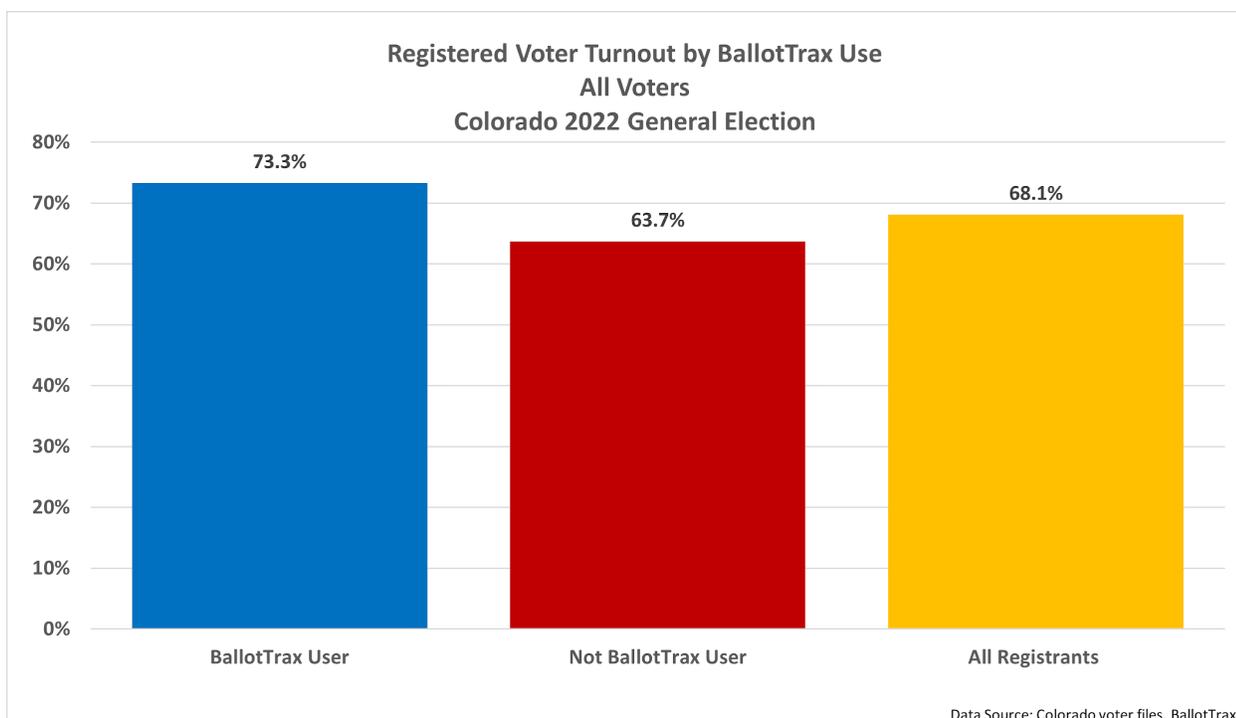
The majority of curable VBM ballots cast by BallotTrax users were corrected and counted in the 2022 general election. Around 62% of VBM ballots that were originally rejected were cured and counted, while a very small portion (0.5%) of voters with curable ballots attempted and failed to correct their ballots. While many ballots were corrected, over one-third of voters with rejected yet curable ballots made no attempt to correct them and they were not counted. Another 0.4% of BallotTrax users with curable, rejected VBM ballots opted to vote in person instead.

Note: Cured ballot rates were only available for California BallotTrax users. We were unable to examine cured ballot rates among voters not using the tracking tool.

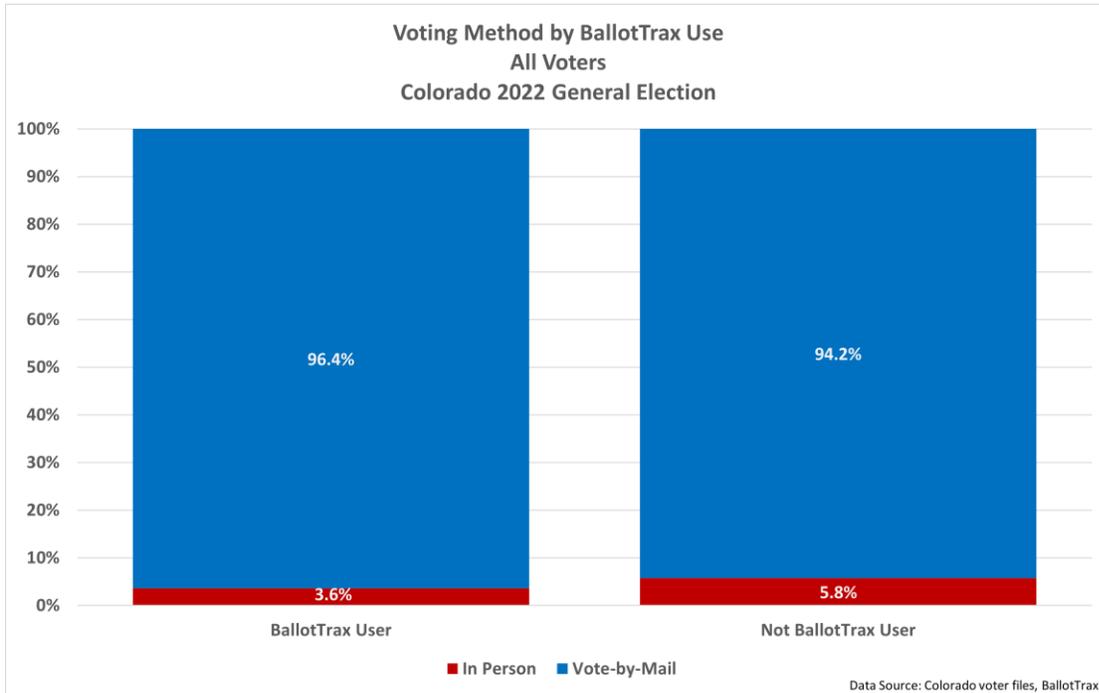
Colorado



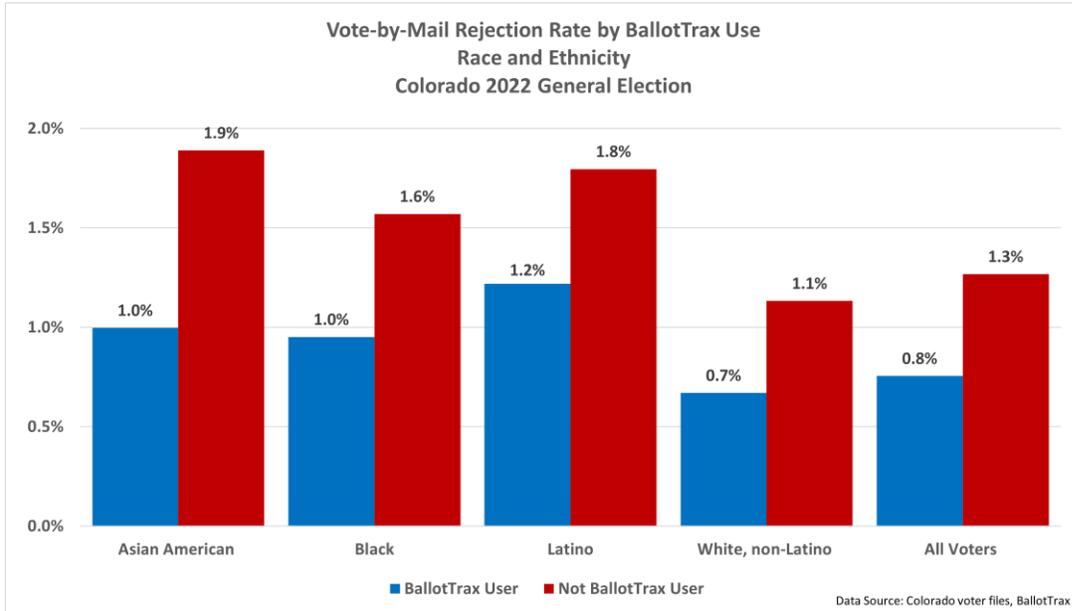
Around half of VBM voters in the Colorado 2022 general election used BallotTrax to track their ballot. Asian-American VBM voters used BallotTrax at the highest rates, while Latino VBM voters used it at the lowest rates. Black and White, non-Latino VBM voters used BallotTrax at similar rates.



While nearly three-quarters of BallotTrax users cast a ballot in the Colorado 2022 general election, the turnout difference between BallotTrax and non-BallotTrax users was smaller (around 10 percentage points) compared to California and Georgia.

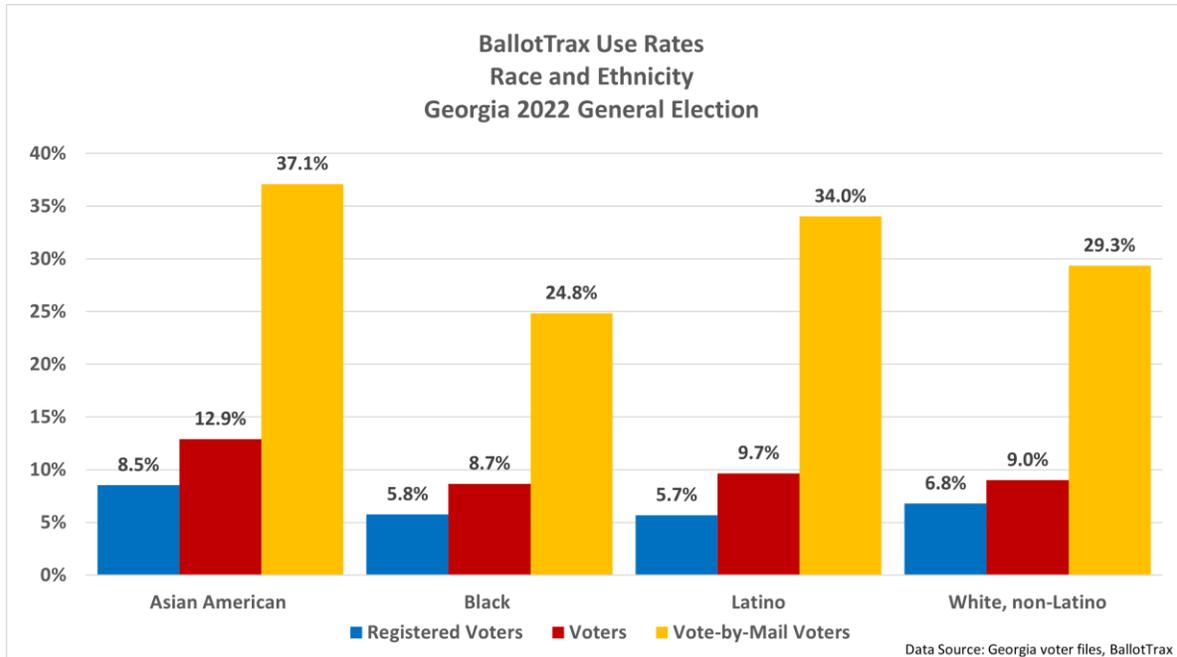


Colorado voters almost exclusively use VBM ballots, although the method is even more common among BallotTrax users. In the 2022 general election, 96.4% of BallotTrax users cast a VBM ballot. While VBM ballot use was also high among non-BallotTrax users (94.2%), the method was used more than two percentage points less than among BallotTrax users.

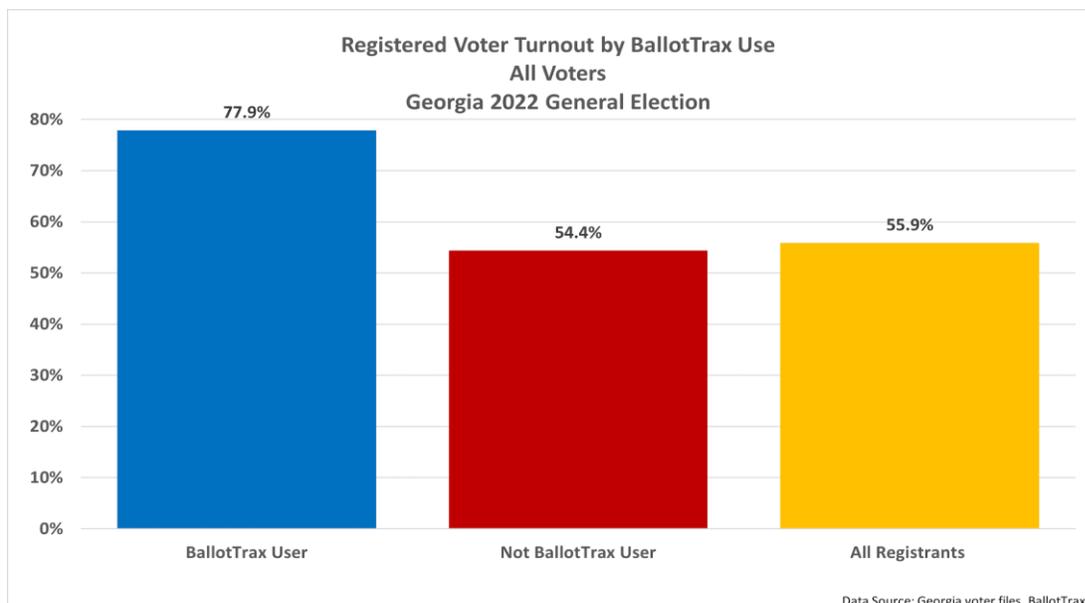


VBM rejection rates were fifty percent higher among non-BallotTrax users (1.3%) compared to voters who tracked their ballot (0.8%). Among voters of color, VBM rejection rates among non-BallotTrax users were at least fifty percent higher, and often more, than rejection rates among those using the tracking tool. Asian-American BallotTrax users, for example, had a VBM rejection rate of 1.0%, nearly half of the rate seen among Asian-American non-BallotTrax users (1.9%). White, non-Latino BallotTrax users had both the lowest rejection rates of all racial and ethnic groups and the smallest difference in rejection rates between BallotTrax users (0.7%) and non-BallotTrax users (1.1%).

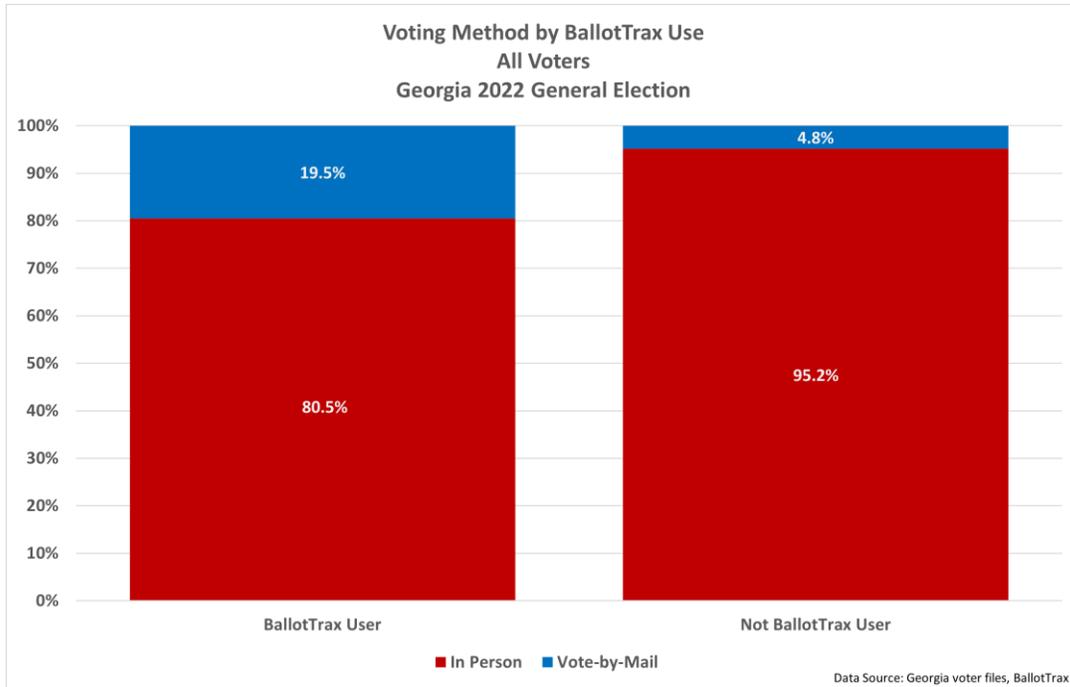
Note: Colorado BallotTrax files used in this report did not include data on cured ballots for BallotTrax users or non-BallotTrax users and we were unable to examine cured ballot rates for Colorado.



BallotTrax use among registered voters in Georgia was notably lower than in California and Colorado, correlating with vote-by-mail use rates. Among the relatively small number of Georgia voters who used vote-by-mail ballots, however, around 28% used the tool – a comparable use rate to California where the vast majority of voters vote by mail. BallotTrax use was also higher among some vote-by-mail voters of color compared to white voters. Over one-third of Asian-American and Latino VBM voters used the ballot tracking tool in the 2022 general election, while under 30% of white, non-Latino VBM voters did so.



BallotTrax users in Georgia had the highest registered voter turnout across the three states observed. Registered voter turnout among BallotTrax users was more than 20 percentage points higher than non-BallotTrax users.



In Georgia, a state in which voters must request an absentee ballot, voters use VBM ballots at notably lower rates than California and Colorado, states in which every registered voter automatically receives a VBM ballot. BallotTrax users in Georgia, however, use VBM ballots at more than four times the rate of non-BallotTrax users. Nearly one-fifth of BallotTrax users who voted cast a VBM ballot, while less than 5% of non-BallotTrax users who voted did the same.

Note: The Georgia files used in this report did not include vote-by-mail rejection data or cured ballot data. For this reason, we were unable to examine VBM rejection and cured rates for Georgia.

BallotTrax Survey: Major Findings

Survey Methodology

We attempted to keep the survey identical in all three states; however, the voting conditions in California and Colorado are more similar than in Georgia. Voters in Colorado vote almost exclusively by mail, as do the vast majority of voters in California. In Georgia, voters must request a vote by mail ballot and provide a reason or “excuse” to the state, so in the Georgia survey, we asked voters how they voted in 2022, which is a deviation from the other two surveys. The survey was conducted by YouGov and was in the field from October 24 through November 24, 2023. We had a total of 1,100 respondents in California, 500 respondents in Colorado, and 650 respondents in Georgia. Ballot tracking users were oversampled in CA and GA so as to improve the statistical power of comparisons between BT and non-BT voters. Table 1 shows the respondent breakdown by party ID.

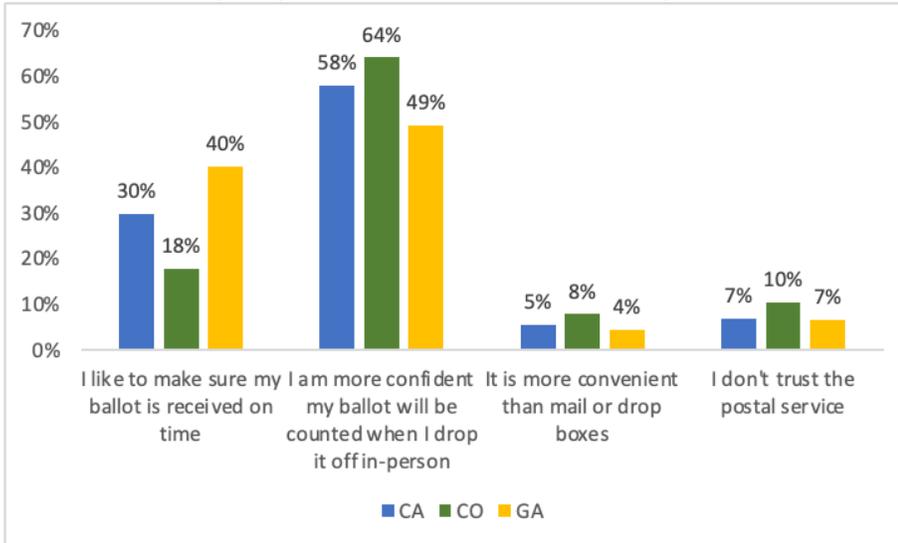
Table 1. Respondents by State and Party Identification

	California	Colorado	Georgia
Democrat	52% (570)	37% (183)	42% (272)
Independent	22% (239)	36% (182)	25% (164)
Republican	21% (222)	22% (112)	29% (186)
Other	6% (69)	5% (23)	4% (28)
N	1100	500	650

Method and Timing of Ballot Return

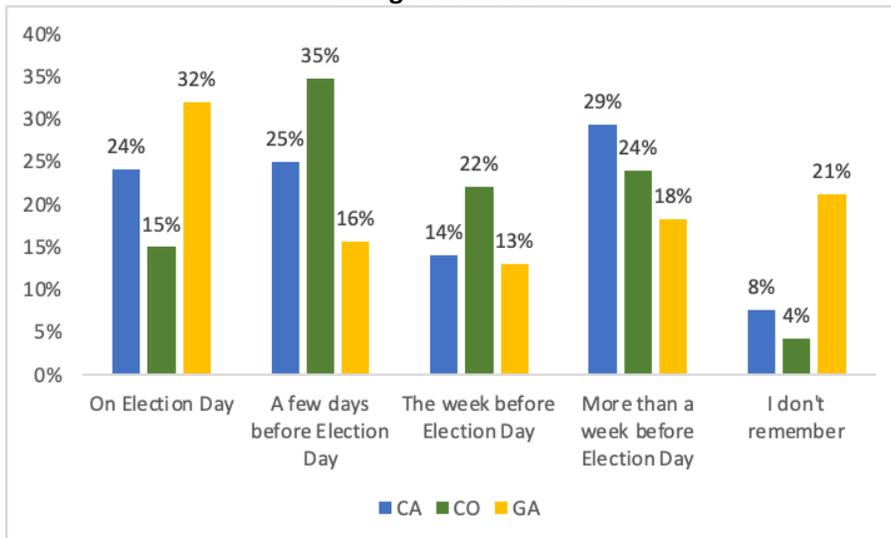
We asked respondents how and when they returned their ballots. In California and Georgia, the modal method of return is via the US Postal Service, while in Colorado, the majority of voters place their ballots in an official drop box. A smaller number of voters return their ballots directly to a polling place, vote center or clerk’s office. This varied by state, with a low of 10.6 percent of respondents in Colorado, 15 percent of vote-by-mail voters in Georgia, and 21.3 percent of respondents in California. We asked respondents why they returned their ballots in person and the majority of voters in all three states reported that they were more confident that their ballots would be counted when ballots were returned in person.

Why Respondents Return their Ballot In-person



We also asked respondents when they returned their ballot in 2022. California and Colorado send ballots to registered voters nearly a full month before Election Day (22 days in Colorado and 28 days in California), and drop boxes are set up prior to ballots being mailed. This allows the opportunity for voters to return their ballots early, as is encouraged by political parties and campaigns. Georgia allows voters to request an absentee ballot between 78 and 11 days prior to the election and sends ballots out as applications are processed. These differences across states produce different patterns of return. One-third of respondents in Georgia reported returning their ballot on Election Day, while the same was true for only 24% of respondents in California and 15% of those in Colorado. Almost 30% of those in California returned their ballots more than a week before Election Day, and 35 percent of voters in Colorado returned their ballots a few days before Election Day.

Timing of Ballot Returns

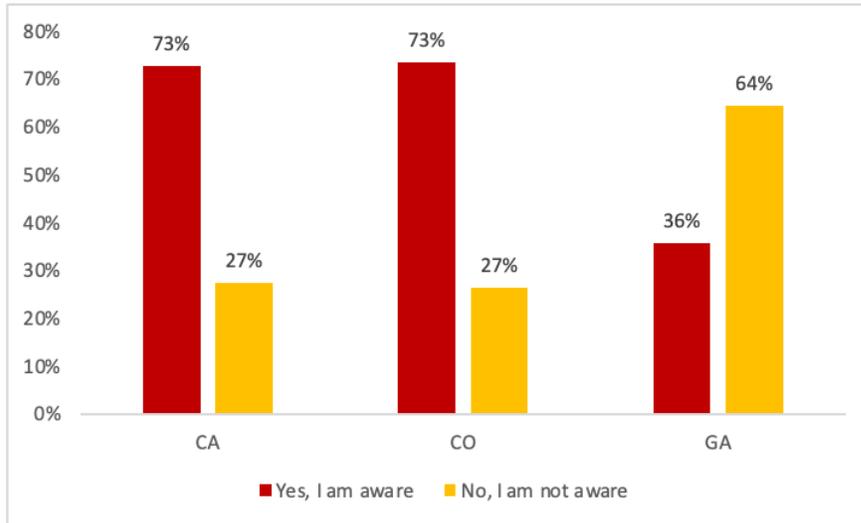


Ballot Tracking Awareness, Use, and Registration

We asked voters if they were aware that ballot tracking is available in their state, and 73 percent of voters in both California and Colorado reported they were aware. Conversely, only 36 percent of voters in Georgia were aware that ballot tracking was offered in their state. This is likely due to the

lower number of people voting by mail, but could also be due to differences in voter education campaigns by election officials.

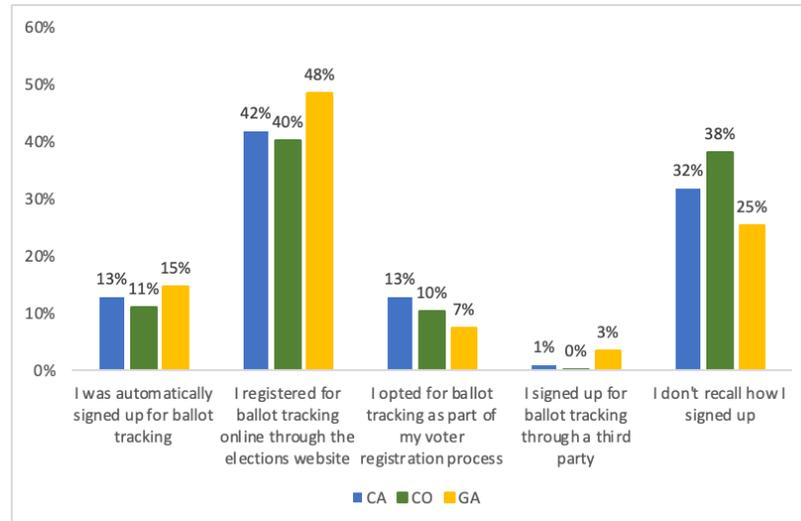
Awareness of Ballot Tracking in State



We followed up by asking the respondents who were aware of the service if they were signed up for ballot tracking. Seventy-two percent of those who were aware of the option in Colorado and 73 percent in California reported they were signed up. Only 51 percent of those who were aware of the service in Georgia reported being signed up. Using self-reported status and voter files for those who reported they didn't know their status, we estimate that approximately 52 percent of respondents in Colorado, 44 percent of respondents in California, and 20 percent of respondents in Georgia use ballot tracking.

The following figure shows how respondents reported signing up for ballot tracking. The patterns are remarkably similar across all three states. Of those who recall how they signed up, the majority report that they signed up for the service through a state or local election website. Approximately 11 to 15 percent report that they were automatically signed up for the service, and roughly 7 to 13 percent report signing up for tracking as part of their voter registration process. Very few voters report that they joined ballot tracking via a third party.

How Respondents Signed Up for Ballot Tracking

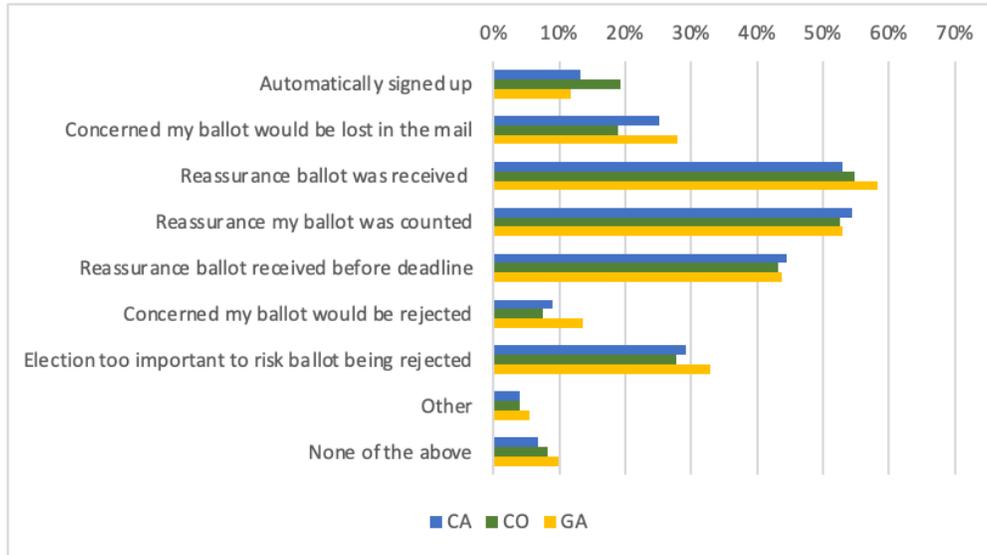


We also asked respondents if they recall how they were contacted with updates about their ballots. Nearly 80 percent of respondents in both California and Colorado report that they were updated via text or email, and fewer than 10 percent in each state report being notified via telephone. In Georgia, approximately 70 percent were contacted by email or text message and 16 percent were updated via phone call.

Reasons for Using Ballot Tracking

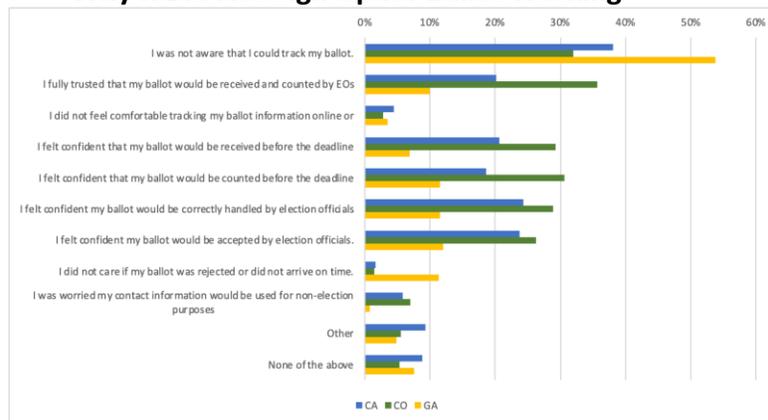
We theorized that the primary reason people signed up for ballot tracking was to ensure their ballot was received and counted. The results show that this is true. Across all three states, wanting reassurance that their ballot was received and their ballot was counted were reported as the top two reasons for tracking their ballot. The third most popular reason in all states was to receive reassurance their ballot was received by the deadline, which varies by state. Approximately 30 percent of voters in all three states reported that belief the 2022 election was too important to risk their ballot being rejected as a reason for signing up for the service. About 20 percent of respondents reported that they had some concern their ballot would be lost in the mail. Interestingly, fewer than ten percent of voters reported concerns that their ballot would be rejected as a motivating factor. Another ten percent reported that they were automatically signed up, signaling they had no personal motivation for using tracking.

Why R Signed Up for Ballot Tracking



For those who did not use tracking, we asked why not. The most common response in California and Georgia was that they were not aware they could track their ballot. This suggests that more educational outreach by election officials could increase the number of people using the service. In Colorado, the most common response was that the voters fully trusted election officials would receive and count their ballots. Respondents from Colorado appear the most confident in all questions about confidence in the process, from their ballot being received by the deadline to being counted and correctly handled by election officials. Taken together, these responses send quite a positive message for election officials in Colorado. Very few people reported that they didn't care or they were worried about their personal information being misused.

Why R Did Not Sign Up for Ballot Tracking



Please see the attached tables for results broken down by partisanship and gender.

Plans for Dissemination

We have already shared the results to-date on this project with the following groups:

- MEDSL virtual briefing in December 2022
- MEDSL Pre-Conference Meeting, Southern Political Science Association in January 2023
- Election Science, Reform, and Administration (ESRA) Conference in June of 2023
- Election Center / National Association of Election Officials Conference in August 2023
- California results have been shared with the California Secretary of State

The CID/EVIC team intends to extensively promote the final and complete results of the Ballot Tracking study during the first few months of 2024 during the mid-winter conference season at events that include:

- 2024 election science conferences including the Southern Political Science Association (SPSA) and Election Sciences, Reform, and Administration (ESRA) conferences
- National Association of Secretaries of State (NASS) 2024 Mid-Winter and Summer conferences
- National Association of State Election Directors (NASSED) 2024 Mid-Winter and Summer conferences
- Election Center / National Association of Election Officials 2024 conferences
- U.S. Election Assistance Commission workshops, hearings, and other special events

We will additionally be issuing a joint press release on this project and supporting this work with social media posts throughout the coming months as we move through the remainder of 2023 and into the primary election season of 2024. Additional slide presentations and other materials will be created and distributed as well.

Products

The following products have resulted from our Ballot Tracking work:

- **Survey Instruments** – The CID/EVIC team will have two distinct questionnaires to share as work products from this Ballot Tracking effort.
- **Poster** – CID/EVIC presented a poster on this Ballot Tracking work that was presented at the Election Center’s Summer Convening of the National Association of Election Officials.
- **Data Sets** –
 - Data sets for California, Colorado, and Georgia of BallotTrax users
 - Data sets for California, Colorado, and Georgia eligible voter surveys

Now that both voter file analysis and voter surveys are complete, the CID/EVIC Ballot Tracking team will release a public report in 2024. This upcoming report will include additional analysis not included in this technical report.

Participants

The CID/EVIC Ballot Tracking team is led by principal investigator Mindy S. Romero, PhD, Research Assistant Professor at the Sol Price School at the University of Southern California (USC) and Founder and Director of the Center for Inclusive Democracy (CID) at USC. Dr. Romero's co-principal investigator is Paul Gronke, PhD, who is EVIC's founder and director, and a political scientist at Reed College.

The 2023 CID/EVIC Ballot Tracking Project is also supported by Anna Meier, Research Associate at CID and communications and election administration and technology subject matter expert Michelle Shafer who serves as EVIC's Senior Program Advisor.

The CID/EVIC team contracted with [YouGov](#), an internationally recognized survey firm with strong expertise in survey design, methods, and administration, to administer the survey component of this effort.

EVIC also contracted with Professor of Political Science at California State, Fresno Lisa Bryant, PhD who helped design and test the three state questionnaires with Dr. Gronke. Additional instrument development and testing support was provided by Paul Manson, PhD, EVIC's Research Director and Research Assistant Professor with the Center for Public Service at Portland State University.

Impact

Ballot tracking provides a technology solution that holds promise for election officials, voters, and campaign and vote mobilization organizations. It is regularly touted as a way to improve access and equity in the election system and to support and improve citizen faith in the integrity of the election process.

Changes and / or Problems

This project was a challenge from its inception; however, this is why the team of collaborators at CID/EVIC were drawn to it.

- **Obtaining Data** - We initially wanted to conduct this full project with a large number of states participating. However, it became apparent that obtaining detailed transactional data would require individual agreements with participating states, a change from our initial understanding that the technology providers in this space would be the only necessary partners. This required the research team to build partnerships with state offices in parallel with the technology providers, a process that resulted in very fruitful partnerships but created substantial delays. In addition, there was a change in the technology space. Our project built a partnership with BallotTrax, but the second major provider, [Ballot Scout](#), developed and at that time administered by [Democracy Works](#), was in the process of licensing Ballot Scout and its associated customer support to

another election technology provider - [Enhanced Voting](#), and could not support our research efforts.