The #TrustedInfo2022 dataset: States' trust-building social media campaigns during the 2022 election cycle.

Supplementary material

June 18, 2024

1 Appendix

1.1 Data collection and methodology

1.1.1 Database of Election Officials' social media accounts

To build the database of state Election Officials' social media accounts on Facebook, Instagram, and Twitter, we replicated (**?**)'s methodology, which focused on the collection of official election websites and social media accounts at the local election jurisdiction level. The (**?**) database contains the complete census of all local election jurisdictions as published by the U.S. Election Assistance Commission, supplemented with information on the presence or absence of a local election website, and an official - government or public service - account on Facebook, Instagram, and Twitter. Following this approach, we used the National Association of Secretaries of State (NASS) member directory, which contains the roster of Secretaries of State and Lt. Governors for all states and U.S. Territories.[1] In 40 states, the state EO position is held by the Secretary of State or the Lt. Governor, with Election Directors holding this position for 10 states. To obtain the names of the state EOs in these states, we used the National Association of State Election Directors (NASED) Roster.[2]

We then used usa.gov's database of state election websites, and added the official platforms - Facebook, Instagram, and Twitter, as listed on each state's website. In the case of a few states, like Illinois, a single individual is designated as the state's Election Official - the Election Director- but a State Board of Elections is the unit that oversees elections.

In some cases, like Indiana, the state election website does not provide any social media information. We conducted Google searches - "[State name] Secretary of State] Facebook/Instagram/Twitter" - to identify official accounts. We exclude any state EO personal accounts: to illustrate, the Mississippi Secretary of State, Michael Watson, has a Twitter page named "Secretary Michael Watson," with the following description,"Christian. Husband. Dad to 3. Mississippi's 36th Secretary of State." We treat this account as a personal one, and instead include the "Mississippi Secretary of State's Office" Twitter page, whose description is "Official Twitter

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[1]National Association of Secretaries of State Roster: https://www.nass.org/memberships/secretaries-statelieutenant-governors.

[2]National Association of State Election Directors Membership: https://www.nased.org/members.

account for the Office of Mississippi Secretary of State," and includes a link to the state election website.[3] As we report in the manuscript, during the 2022 election cycle, 49 states had an official Facebook page, 39 states were active on Twitter, 17 on Instagram, and 13 operated an official page across the three platforms.

We imported our social media accounts list into Junkipedia, which integrates social monitoring platforms like Crowdtangle, and their APIs, allowing users to track content shared by specific accounts across multiple platforms in-real time.[4] We are able to access historical content for up to 12 months since an account is uploaded on the platform, any new content that is posted by officials, and set up topic-specific data exports that allow the construction of separate datasets based on specific themes and terms.

1.1.2   Coder Training and Inter-coder reliability checks

Once the import was complete, we created custom search for posts shared between specific time-frames during the election cycle. Data collection started in October 2022, and so our first set of posts covered September 10 - September 30, 2022. The next set covered October, with the final set covering November 1-8, and November 9-30, 2022. In Figure 4, we present a snapshot of the saved search we created at the end of the time period we tracked (September 10 and November 30, 2022), which includes the whole corpus of posts we analyzed. In this search, we included three lists, each one comprising of the state EO accounts for a specific platform. Using the "edit labels" in the "Label Mode" function, we were able to conduct manual content analysis using the codebook we created for this tracking project - #TrustedInfo2022 Codebook. The total number of posts in our corpus was 10,042, and after coding ended, the complete corpus of posts was 10,000. We excluded 42 posts that were pulled from Crowdtangle but were not coming from any EO accounts.

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Figure 1: Junkipedia platform, snapshot of saved search of complete corpus of state EOs' social media posts
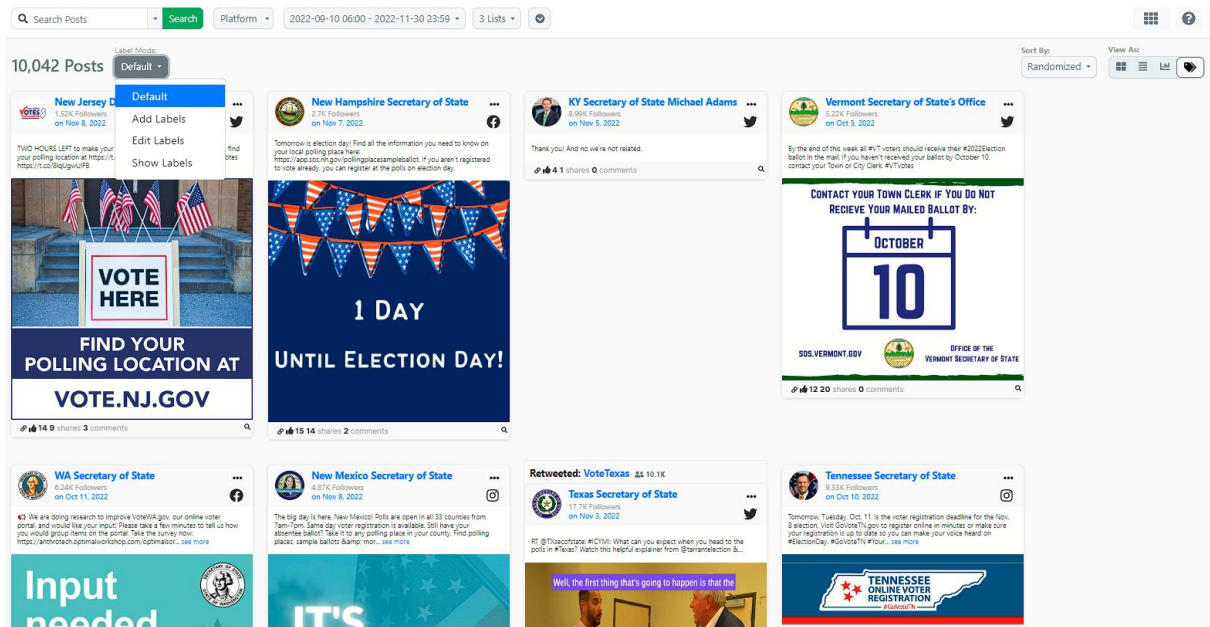
Our coding team consisted of three graduate students, two undergraduate students, and the lead researchers, with ongoing training support from Junkipedia. We help a training session to introduce coders to the Junkipedia platform and the codebook. Each coder was provided with a randomly sorted subsample of the research set where each post could be reviewed and coded using a hierarchically nested set of labels, as shown on Table 1 (and in detail in the next section). We conducted five rounds of reviews to ensure high intercoder reliability (.70 and up) across all thematic categories and resolving issues with categories receiving agreement scores below that threshold. The practice sessions involved a subsample which all coders would independently label, and the lead researchers would export to run the reliability checks. After every round, we reviewed discrepancies with the coders and made adjustments to our codebook's structure, rather than content, to ensure more effective labeling flow.

Figure 5 is an example of a practice set, and what our coders would see when accessing the set. We set the filters to "unlabeled by anyone," which allowed every coder to code the same set of posts in the practice rounds. After we completed the reliability checks, we switched the filers to "never labeled," to make the coding process more efficient. "Never labeled" means that posts were coded by only one coder. As project "owners," we conducted regular checks to ensure that posts

were coded accurately.

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Figure 2: Junkipedia labels

1.2 Codebook and Label Description

In Table 3, we present the #TrustedInfo2022 codebook, which follows a hierarchical, nested, structure of election-related labels. The codebook is organized into three tiers. Tier 1 (T1) includes the top labels as displayed in Figure 5. Tier 2 includes the labels associated with a specific Tier 1 label, and Tier 3 includes the labels associated with a specific Tier 2 label.

Type captures the purpose of a message shared by election officials: news stories about the election official or the jurisdiction which the EO serves; posts about election deadlines as they are specified in election code; instructions on how to participate in the election process and how election officials prepare for elections, such as "here is how to register to vote," "click here [link] to request a mail ballot," or "here is how our office prepares for November 8, 2022.". We also capture platform-specific message types, such as replying to other people's posts, sharing a thread, or retweeting.

Finally, in this category we capture efforts to reach specific electorates - *Outreach* - such as K-12, and High school students, college students, elderly voters, minority voters, voters with disabilities, language minority voters, and UOCAVA voters (military and overseas). We also include a label for any public appearances made by the state EO, such as events hosted by the EO office, or visits to local election offices.

Visuals captures how EOs utilize images and videos to convey their messages. Posts were coded for the presence of human imagery and non-human imagery, as well as videos. For non-human imagery, our coding scheme includes variables that capture how EOs' customize graphics to communicate that the information shared comes from official sources, such as attaching the EO's logo on an informational flier. We also included a label to track whether images, human or non-human, include an "I voted" sticker. Regarding human images, we created labels for whether the image includes the state EO - clearly identified in the text or in the image, voters, and election workers. In cases where posts included stock images of humans, we instructed our coders to only select the "Human Imagery" (T2) label.

The *Access* category tracks the presence of languages other than English. It also tracks the presence or absence of links, with specific labels that capture accessibility in terms of whether the link is clickable or unclickable. We define clickable in the most accessible manner, meaning that

a voter can simply click on the url provided and access the information shared in a post, in most cases a website. Upon deliberation, we decided that QR codes are non clickable.[5] We also include a variable for whether or not the post directs voters to an official state election or local election website, or an external site, such as a news organization, a federal agency, or other organizations.

Due to the explicit focus on trust-building communications, our codebook includes a specific label for the presence of the #TrustedInfo2022 hashtag, in text or/and visual form. As we explain in the manuscript, the NASS #TrustedInfo2022 message is our baseline, as it represents a highly publicized and coordinated campaign by a professional association of EOs with an explicit purpose to build trust in elections and combat misinformation. Our intention was to track how coordinated state EOs were in signaling to voters that they are trusted sources of election information by including the hashtag in social media posts. As we show in Table 1, and in Table 3 below, we created an **Alert** label to flag any mention in the post about misinformation, either indirect or direct.

To more adequately capture how EOs explicitly signal messages of trust to their constituents, we created the *Keywords* label within the ***Signaling*** category, and instructed our coders to use the label liberally, but making sure that the label is used when terms that EOs use to convey trust-building messages, such as "elections are **safe** and **secure**," "visit [here] for **accurate** election results," "your election officials is your **trusted** source for election information," are used. Terms such as "access," "integrity," "unofficial," "counts," "power," , "heroes" were also coded using this label. When applying this label, coders were instructed to use the "Notes" function (Figure 5) to document which word, or set of words, the posts included, allowing us to identify any signaling words used in a given post in text or in visual form.

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[5]We will revise the codebook to include a QR code label.

Table 1: #TrustedInfo2022 Codebook

Label (Tier)	Description
Type (T1)	Type/purpose of post
In the News (T2)	Story/article where an EO is featured
Election Deadline (T2)	Deadlines as specified in state election code
How to (T2)	How to register/vote & how procedures are conducted
Reply (T2)	EO reply to a post
Share (T2)	EO re-shares a post
Outreach (T2)	Events/visits/information targeted to specific groups
Students (T3)	K-12/High School/Colleges
Elderly voters (T3)	Outreach to specific community
Minority voters (T3)	Outreach to specific community
Voters with disabilities (T3)	Outreach to specific community
Language Minority voters (T3)	Outreach to specific community
UOCAVA (T3)	Outreach to specific community
Public appearances (T3)	Events/visits to local offices/town halls
Visuals (T1)	Visuals included in post
Video (T2)	Video shared in post
Non-human imagery (T2)	Non-human images in post
Info slide/image (T3)	Slide/document with info about elections
Logo (T3)	Office logo/other logos
I voted sticker (T3)	Sticker attached on human imagery/used on images
Memes/Gifs (T3)	
Human Imagery (T2)	Images of actual humans
EOs (T3)	Explicitly referenced in text
Voters (T3)	Explicitly referenced in text
Election workers (T3)	Explicitly referenced in text
Access (T1)	Language & info access
Multilingual (T2)	Language other than English
Links (T2)	Inclusion of links in post
Clickable (T3)	Link is clickable
Unclickable (T3)	Link is unclickable
Election website (T2)	Link connects to election website
External website (T2)	Link connects to external website
Trust-building (T1)	Inclusion of #TrustedInfo hashtag
Alert (T1)	Explicit/indirect reference to misinformation
Signaling (T1)	Use of explicit trust-related terms & hashtags
Keywords (T2)	Explicit trust-related terms
Hashtags (T2)	Hashtags textbfexcluding #TrustedInfo2022

Table 2: #TrustedInfo2022 Codebook - Continued

Label (Tier)	Description
Theme (T1)	Election procedures
Ongoing election procedures (T1)	Ongoing during cycle
List maintenance (T2)	Maintenance process; snapshots of reg. voters
Fraud/illegal conduct (T2)	Investigations; Updates
Cybersecurity (T2)	Election cybersecurity training/information
Voter registration training(T2)	Training for voter registration drives
Mock elections (T2)	Mock elections in schools/colleges/community
Pre-election procedures (T1)	Before Election Day
Poll workers (T2)	Recruitment/training/thank you
Staff meetings/activity (T2)	Preparing for elections
Ballot initiatives/candidates (T2)	Signature verification; candidate filings
Candidate training (T2)	Training for prospective candidates
Logic & Accuracy (T2)	Voting machine checks
Public observation/poll watchers (T2)	Eligibility & rules
Post-election procedures (T1)	As soon as -early - voting begins
Unofficial Results (T2)	Election night reporting; turnout totals
Counting (T2)	Counting/Canvassing
Curing (T2)	Mail/provisional ballot curing
Audits (T2)	Automatic/Risk-limiting audits
Recounts (T2)	Automatic/requested audits
Certification (T2)	Certification of election results
Voter Registration (T1)	
Pre-registration (T2)	Youth pre-registration
Method (T2): OVR (T3)	Online voter registration
Method (T2): Mail/In-person (T3)	mail-in or in-person registration
Method (T2): EDR/SDR (T3)	Election/Same Day Registration
NVRD/M (T2)	National Voter Registration Day/Month
Voting Methods (T1)	Information about how to vote
In-person (T2): Curbside (T3)	Info on curbside voting
In-person (T2): Early (T3)	Early in-person voting
In-person (T2): Absentee (T3)	Paper-based voting
In-person (T2): Election Day (T3)	ED voting
By mail/absentee (T2)	Postal voting
Request (T3)	How to request a mail ballot
Return (T3)	How to return a mail ballot
Tracking (T3)	How to track mail ballot
Provisional voting (T2)	Why & How to vote provisionally

Table 3: #TrustedInfo2022 Codebook - Continued

Label (Tier)	Description
Election ready (T1)	What to know before voting
Verify/update info (T2)	Update/change registration info/party id
Ballot drop off (T2)	drop boxes & intake stations
Ballot initiatives (T2)	information about initiatives on the ballot
Eligibility (T2): Age/Citizenship (T3)	Info about eligibility based on age/citizenship status
Eligibility (T2): Residency (T3)	Info about eligibility based on residency status
Eligibility (T2): Felon (T3)	Info about eligibility based on residency status
Voter ID (T2)	Voter ID requirements
Sample ballot (T2)	Where to find
Candidate info (T2)	Info about candidates/races on the ballot
Special/Primary elections (T2)	Info about special/primary elections
Polling location (T2)	How to find one's precinct-based location ; wait times
Vote Centers (T2)	Location and times of operation
GOTV (T1)	Motivational messages to GOTV
I voted stickers (T3)	Used in the context of GOTV efforts
Non-election related	Non-election related (Thanksgiving, Labor Day, etc)
Bookmark	Flag as best/bad practice, innovative, different, etc.

We cover the election administration process with procedures conducted by EOs during the election cycle, and break them down in three phases - ***Theme***: ongoing, pre-election, and post-election. The first includes tasks that EOs conduct on a regular basis, such as voter list maintenance, registration drive trainings, cybersecurity trainings, and voter fraud and/or illegal conduct investigations. The second category ***Pre-election procedures*** includes tasks that EOs must complete in preparation for Election Day, such as recruiting and training poll workers, Logic and Accuracy testing, signature verification of ballot initiatives or write-in candidate petitions, poll watcher trainings and candidate trainings. The third - ***Post-election procedures*** includes tasks such as sharing unofficial election results, information about audits and recounts, curing mail ballots, and election certification.

We constructed nested categories within the ***Voter Registration*** category to code posts with information about registering to vote, which include method of registration (Online voter registration, mail-based and in-person registration, and Election day/Same Day registration, as well as information about youth pre-registration. We also included a label for National Voter Registration Day/Month to capture how EOs participate in other national campaigns, such as the NVRD

campaign.[6]

Insofar as capturing voting processes, we created two voting categories, ***In-person*** and ***By mail/absentee***. The first category includes all processes where voters cast their votes in person at a polling location, early or on election day. We include in-person absentee in this category, as it is used by some states - Mississippi, for example - to allow voters to cast a paper ballot at a centralized voting location before Election Day. The second category includes processes where voters cast their vote by mail, or they return in-person at a drop box/intake station. In this category, we include the three steps voters who vote by mail take, namely requesting and returning a mail ballot, and tracking the status of their ballot. Finally, we include a separate category for provisional voting; although provisional votes are cast in-person, the process is distinct, as it constitutes a failsafe to voters who experience issues with verifying their eligibility at the polls.

Our last thematic category is named ***Election ready*** and covers information that EOs usually convey to voters as Election Day nears, usually in the form of a hashtag like #electionready: verifying or updating one's registration information, where to find one's polling location, wait times, who is eligible to vote, what ID requirements are in place, how to access one's sample ballot, which races are on the ballot and who the candidates are, and information about special elections and primaries.

Finally, we added a label for any information that is considered motivational, or part of EOs' Get Out The Vote (GOTV) efforts. Usually, although not exclusively, these efforts include showing I voted stickers, voters wearing I voted stickers, or sharing "Did you get your I voted sticker yet?" type of messages, which is why we included an *I voted sticker* label here.

Because not every message shared is election-related, we used the ***Non-election-related*** flag, as well as a ***Bookmark*** flag for any post that seems noteworthy: example of best practices, bad practices, unique, creative, or perhaps offensive.

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[6]National Voter Registration Day: https://nationalvoterregistrationday.org/.

1.3 Coding examples

The categories we include in our codebook are not mutually exclusive. A typical post would share information about an upcoming election deadline, with instructions to voters on how to complete an action - register to vote, request/return/track a mail ballot, find a polling location, include an information slide with the state EO's logo and hashtags (Figure 6).[7]

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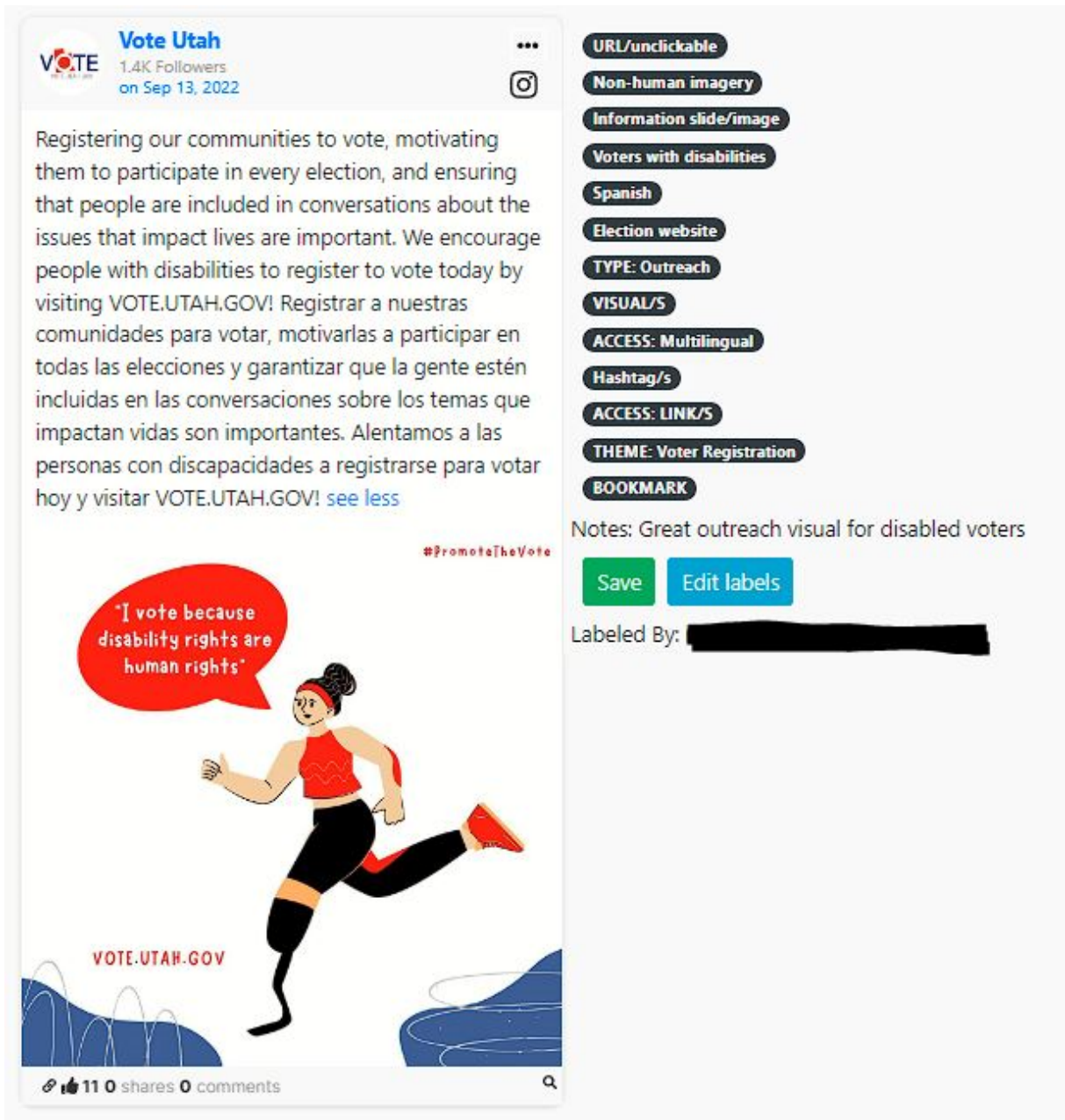Figure 3: Example post: Tennessee Secretary of State on Instagram
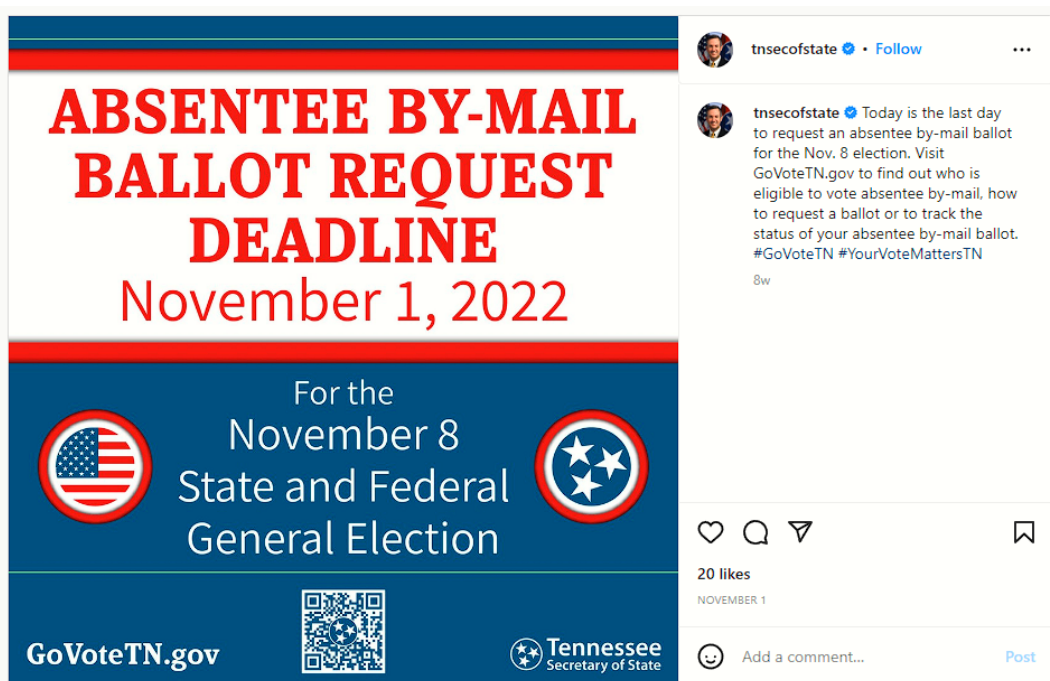
Figures 7 and 8 show examples of two posts with assigned labels after they are coded.[8] Figure 7 shows the exact post we show in Figure 5, but with the assigned labels. This post, shared by the official Instagram account of the Utah EO on September 13, 2022, is explicitly targeted to voters with disabilities, includes an explicit mention about registering to vote, is provided in both English and Spanish, includes a flier with the hashtag #promotethevote, and an election website both in text and on the image.

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[7]Note that the flier includes a url (GoVoteTN.gov) but it is not clickable. Further research is needed to assess how this impacts voters' ability to access the website directly or whether the inclusion of urls helps voters retain the website name and search for it themselves.

[8]To ensure privacy of the coders, we have redacted name that comes after "labeled by."

Urls included in Instagram are unclickable, which is why the inclusion of a link in text is labeled as unclickable. The same post on Facebook would be coded identically, except for the link label, which would be coded as clickable. This post was also bookmarked, and includes a comment by the coder about the use of visuals.

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Figure 4: Coded Post Example I: Utah EO on Instagram

In Figure 8, the official Facebook account of the New Hampshire EO informs military and overseas voters (UOCAVA) about how to track the status of their mail ballots. The post includes non-human imagery, discusses mail voting, and includes a clickable link, which directs to the state election website.

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Figure 5: Coded Post Example II: New Hampshire EO on Facebook

In Figures 9 and 10, we demonstrate how we applied the #TrustedInfo2022 label, and how we determined if a post was trust-building. Figure 9 shows a post by the official Oregon EO account on Twitter, which includes both the #TrustedInfo2022 hashtag, and an usage of trust-related signaling words (secure). In Figure 10, the post shared by the Michigan EO account on Twitter includes two trust-building terms (accuracy, security), but not the #TrustedInfo2022 hashtag. The post from the Maryland EO account on Twitter, on the other hand, is a useful example of using the hashtag without explicitly signaling trust-related messages, namely that elections are safe, and/or that EOs are trusted sources.

When exporting the coded data in csv format, we are able to extract the posts that were assigned the #TrustedInfo2022 label, as well as the posts that were assigned the *signaling*; *keyword* labels, and identify those that included trust-related terms, such as "safe," "secure," "accurate," "trusted." We also run a boolean search on Junkipedia with these terms, which yielded a smaller number of posts than the one we include in our database. That is because the term search would not identify text in images, like the use of "secure" in Oregon's post (Figure 9).

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Figure 6: Example of trust-building post

Figure 7: Example of posts coded as "Trust-building" (left-hand) & #TrustedInfo2022 (right-hand)

The labels assigned to the post shared on Twitter by the Michigan Department of State were: post-election; counting; visuals; non-human imagery; logo; link; unclickable; signaling (with a note that the signaling words are "accuracy," "security," "unofficial." Posts that included these signaling words were then coded as "trust-building."

The labels assigned to the post shared by the Maryland State Board of Elections on Twitter were: pre-election; meetings; hashtags; #TrustedInfo2022; links; clickable; visuals; non-human imagery; logo. This post was not coded as trust-building, but was included in the count of posts that include the #TrustedInfo2022 hashtag.

1.4 Breakdown of EO Social Media Posts by EO Partisanship

Figure 8: Breakdown of all social media activity of state EOs vs Trust-building messages, by EO partisanship