This document is one in a series created as part of the Cybersecurity and Infrastructure Security Agency (CISA) Elections Infrastructure Government Coordinating Council and Sector Coordinating Council's Joint COVID Working Group. These documents provide guidance for state, local, tribal, and territorial election officials on how to administer and secure election infrastructure in light of the COVID-19 epidemic.

Signature Verification and Cure Process

Overview

The FAQs for the signature verification and curing process are provided separate from the Inbound Ballot Process guide because this process is not performed or required in every state for accepting mail ballots, or absentee applications, for counting.

On its face, the process is simple: Does the signature on the envelope match the signature on the voter registration form? Yes or no? When dealing with just a handful of returned mail ballots, this is a manageable process. When dealing with tens of thousands of signatures, this review has the potential to become a bottleneck in the process. Having a highly organized process and a well-trained team of verifiers is the key to success.

General Considerations

How do you transfer and track ballots?

As with the other areas of inbound ballot processing, tracking the transfer of trays of envelopes and batches of ballots as they move through the process is important in the Signature Verification process. This starts with the physical area where Signature Verification will take place. A separate room that can be secured by badge or key access is ideal. If not, delineate a section of your ballot processing space as the Signature Verification area.

Consider the following as you begin planning:
- ❑ Create a process for checking out batches of returned ballot envelopes to be verified and checking them back in to be sliced open and then moved to ballot preparation.
- ❑ Consider color coding—the trays, the carts, the room sign, etc. The color of the tray, etc. indicates the stage in the process where a particular batch resides.
- ❑ Do a piece count at the end of each verification session to ensure the total number of "accepted" and "rejected" return envelopes matches what is showing in the voter registration system.

- ❏ Strictly maintain ballot tracking forms and control logs throughout the process.
- ❏ Return envelope design plays an important role. Consider the size of the signature box. There is a potential for the signature to fall outside of the scanned area if the size of the signature box/line on the envelope is too small, increasing the chance that the signature will not match.

Are there things you should consider doing prior to the election to ensure success?

The quality of the signature images in your voter registration database will play a major role in the number of ballots that are accepted or rejected. The goal is to ensure that everyone who is eligible to vote, who returns a ballot, to have their vote counted. Also, rejecting otherwise valid signatures because of a bad reference image ultimately costs an election office time and money.

Some reasons for having no image on file or poor-quality images on file are:
- ❏ Records were transferred from a legacy paper registration system but were never scanned in.
- ❏ Signatures have not been updated in more than 10 years.
- ❏ Signatures came from an electronic pad.
- ❏ A voter registered themselves online and his/her identity was verified through non-signature means (DMV/HAVV).

Consider searching the voter registration database for records that do not contain a signature and contacting voters to have them supply one. You can take that a step further and follow Hawaii's lead by sending every voter a signature capture card.

What equipment and supplies will you need to purchase?

- ❏ Automated signature verification software (optional)
- ❏ Mail trays for rejected ballots and cure letters
- ❏ Envelope and other supplies for sending cure letters
- ❏ Ballot tracking and reconciliation forms

Can the signature verification process be automated?

Automated signature verification (ASV) applications can be integrated with your mail ballot sorting equipment and voter registration system. This technology has the potential to speed up the signature verification process if you are expecting large quantities of returned ballots. The technology for this process uses a camera to capture the voter's signature from the ballot return envelope as it is being sorted. The image is then compared with the reference image from the voter registration database.

The number of signatures accepted as matches will vary depending on the quantity and quality of the reference signatures from the voter registration database. Over time, the quality of the reference images normally improves and can increase the number of signatures accepted. ASV applications can also improve the efficiency of the human verification process by providing a user interface to compare the two images.

ASV software has reporting functions that assist you with reconciling and accounting for the number of ballots in the accepted, challenged, and rejected status.

What should you consider if you don't have mail ballot sorting equipment and an ASV system?

Without an automated signature verification/sorting system, you are most likely using a mostly manual application to give the voter credit for voting and viewing the reference signature from the voter registration system. This is often done with a hand-held scanner that lets you scan the barcode on the envelope, bring up the voter's reference signature in the voter registration system, and compare it to the signature on the return envelope. This normally includes some function for marking the voter's ballot as accepted, challenged, or rejected.

Similar to other stages of the process, knowing the time it takes for a batch of returned ballot envelopes to move through the manual verification process will help you develop a model for staffing to avoid delays in processing and bottlenecks. The other important consideration is a well-documented plan for ballot accounting as envelopes are moved from the initial review session, to a challenged status, and then back into the system for processing if/when the signature is cured.

Without an automated system to scan and provide reports, regularly pausing to reconcile will be important.

Signature Verification Process

Training

States that vote primarily by mail have developed signature verification training programs. A few of those are listed at the end of this guide under *Additional Resources*. Staff responsible for signature verification will have to be trained. Your training should provide as many different examples as practical of different signature characteristics along with time for study and hands-on practice.

Tiered System of Review

A tiered system of review ensures that a voter's signature is not rejected on a single pass. By incorporating multiple layers of review, you create a system that promotes transparency and integrity of the process. The outline below illustrates how this works whether or not you are using signature verification software. It does not consider states that require signature review to be performed by the canvassing board but assumes all ballots are reviewed at least once.

ASV/Tier 1 Review

Using signature verification software can be considered the first tier in the review process. Essentially, the software is looking for the image from the envelope and the image from the voter registration system to be a near-perfect match. Most ASV software can be set at different tolerances, meaning you can vary how precise you want the images to match. Best practice is to not allow much variance between the envelope signature and the voter registration signature during this first tier of review.

In the absence of ASV software, a human can still perform this first tier of review. The process is the same. They are looking for an almost perfect match. Everything else is rejected.

Tier 2 Review

This second tier of review, on ballots that did not match in the Tier 1 review, is always performed by human inspection. This time, reviewers are taking a closer look at the source image and the reference image and using the techniques they were given in training to make a decision about whether or not to accept or reject the signature. While more time consuming than the first-tier review, Tier 2 review should not require more than 30 seconds per signature.

Tier 3 Review

This final tier of review, for ballots that did not match in either Tier 1 or Tier 2, requires much closer inspection and often includes looking deeper into the voter record for older signatures or other sources of evidence. Ideally, that includes signatures on file from previous registration updates or mail ballot request forms. Because the signature will be in a final rejection status after this tier of review (unless the voter meets the criteria for curing the discrepancy) it is important to have a bipartisan team make the decision together. This level of review is a bit more painstaking and can take up to 3 minutes per signature.

Audits

Audits can play an important role in the signature verification process. Looking at a random sample of signatures that has already been reviewed can tell you how well the system is working. This is especially important if you are using an ASV system. One way to strengthen

trust in the process, is to check samples throughout the election to ensure the human eye would reach the same conclusion as the ASV system.

Performing the same type of audit on signatures that were reviewed by human eyes can help you identify workers that may need additional oversight or training. ASV software can help you track the data from the human review to look for outliers: reviewers who are accepting or rejecting outside of the normal distribution. Without ASV software, consider having a "supervisor team" of verifiers examine batches throughout each day to look for these outliers.

Signature Cure Process

Nineteen states require that voters be notified when there is a discrepancy with their signature or the signature on the return ballot envelope is missing. This should be considered in states that do not require it but are looking to expand voting by mail.

A daily system for "curing" involves sending out a letter and blank affidavit describing the reason the voter's ballot has been rejected and how they can "cure" or remedy the situation. This often requires the voter to mail back the signed affidavit along with a copy of some form of valid identification. Some states use both a letter and an email to ensure the voter knows to take additional steps to ensure his or her ballot is counted.

On the receiving end of the process, Signature Verification workers receive the incoming affidavits and match them up with the challenged ballot. The signature on the voter's affidavit form is used as the new reference signature and is compared with the signature on the returned ballot. When the signatures match and any necessary ID requirements are met, these ballots are marked in the system as accepted and moved forward for Ballot Preparation.

A few considerations that can make this process much smoother:
1. Have a way to organize ballots that have been rejected for signature discrepancies.
2. Have a system for sending out cure letters and affidavits and tracking which ones have been returned.
3. Have a plan for notifying the voters as quickly as possible and preparing the required form letters and affidavits. This might include:
   ❏ Sending messages through your ballot tracking application.
   ❏ Sending the letter and affidavit using email.
   ❏ Sending a text reminder or using a text-to-cure application.

In states that require it, when should the signature verification and cure letter process take place?

Signature verification is time-consuming. Start the process as soon as ballots start coming in or as soon as your state allows. Starting early and performing the process regularly as ballots are received ensures voters have enough time to cure their signature issues.

Other Considerations

There are likely legal considerations that are relevant to signature verification and cure procedures. You should consult your lawyer about those.

It is also worth reviewing laws, policies, and procedures regarding a voter's ability to cast a ballot in person if they have returned a mail ballot that was rejected because of a signature discrepancy. Considerations include:

❏ How will that voter appear in the pollbook? Will the record still have a flag showing "voted by mail" if the ballot was rejected?
❏ Will that voter be required to vote a provisional ballot?
❏ If so, will a rejection of the mail ballot automatically transition to an acceptance of the provisional ballot?

Security Considerations

The documents and information exchanged with voters as part of the "cure" process will likely contain personally identifying information. For this reason, extra safety precautions should be taken. Creating a secure portal for voters to use when returning their "cure" affidavits and photo ID is one way you can protect that information.

Also consider that the signature verification process requires some degree of access to the voter registration database. This means it is a good idea to review cybersecurity best practices and recommendations for web-based portals and file servers such as:

❏ Using security best practices for web and network connected election systems, including two-factor authentication (2FA) for employees and voters.
❏ Encrypting traffic using HTTPS or, if you use a file server, ensuring it uses appropriate security protocols.
❏ Placing the voter portal on a government TLD, preferably .gov.
❏ Obtaining outside cybersecurity assessments, such as CISA vulnerability scanning and remote penetration testing.
❏ Developing a coordinated vulnerability disclosure (CVD) policy. This allows well-intentioned cybersecurity researchers to find and disclose vulnerabilities privately to an election official, giving the election official time to implement upgrades and patches before disclosing the information publicly.

❏ Placing the application on a network that is continuously monitored, such as the network with an Albert Sensor or other intrusion detection and prevention (IDP) systems.

To request services from CISA, email CISACustomerService@cisa.dhs.gov. Each of CISA's services is provided at no cost to election jurisdictions and its private sector partners. Also, the Election Infrastructure Information Sharing and Analysis Center (EI-ISAC) has resources, guides, and tools available to election officials for protecting election infrastructure.

Additional Resources

Oregon SOS Signature Verification webinar – An excellent, comprehensive presentation.

Colorado SOS Signature Verification Guide - A comprehensive training program that includes hands-on exercises.

Oregon VMB Procedures Manual - Created by the Oregon SOS. Signature Verification steps are on pages 35 and 83 with signature examples on pages 73-74. The manual also contains examples of "cure" letters on pages 86-87.

Text to Cure Mobile Tool - Election Center Professional Practices Program detailing a web-based application used in Arapahoe County, Colorado that allows voters to electronically sign and submit an affidavit along with the required ID. (paper behind membership paywall)