

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.

Inbound Ballot Process

Overview

The inbound ballot process covers everything that takes place from the time ballots are brought back to the counting facility by ballot collection teams or delivered by USPS, until the ballots are permanently sealed in storage containers for the retention period. This includes ballot receiving, ballot verification, ballot preparation, ballot scanning, ballot tabulation, and post-election audits.

Although state laws vary on how soon before the election each part of the process can begin, there are some advanced considerations regarding purchasing equipment and building procedures. One of the most important components of the inbound ballot process is having a system to track ballots as they move from one processing area to another to account for any changes in the overall quantity.

This guide outlines considerations for a typical inbound ballot process in a high-volume mail ballot environment.

General Considerations

One of the most challenging aspects of creating a plan for processing inbound ballots is estimating how many mail ballots will be returned and when so you can staff accordingly. It is reasonable to assume that the majority will be returned on Election Day and more precisely, on election night.

A few simple steps can improve your planning model for how many people you will need to train and hire:

1. Document each action conducted in each stage of ballot processing.
2. Conduct a dress rehearsal. Have staff walk through each stage of the process using an adequate sample of test envelopes and test ballots.
3. Conduct time studies. Knowing how long it takes 1,000 ballots (for example) to get through each stage of the process will help you make better decisions about how to staff and where to shift your resources (people) when processing at peak demand.

4. Cross-train Signature Verifiers, Ballot Scanners, and Adjudication teams where possible. These are the critical skill stages and are areas where bottlenecks can be expected to occur. Cross-training staff enables shifting resources as necessary to mitigate or avoid these bottlenecks.

If your state does not require it already, partisan affiliation could play a role in hiring poll workers and temporary staff. This means creating bipartisan teams as often as possible, including using unaffiliated workers, to create an even representation of your electorate.

When calculating the amount of space, you need, the more you can get the better. Having space to physically separate process areas helps you have greater control of and security for the process. It also helps avoid trays of ballots being inadvertently moved to the wrong processing station. Necessary space includes room to store ballots, ballot envelopes, and miscellaneous contents that arrive. **Nothing should be thrown away until after the period to challenge the election has passed.**

Finally, social distancing should also be a factor when you think about space requirements. Creating space not just between processes, but between the people performing each process, provides a safer working environment. For counties or jurisdictions with limited office space, consider alternate locations such as a voting equipment storage warehouse or a school that has closed. Always be certain that physical security remains a top priority.

What equipment and supplies will you need to purchase?

Each ballot processing area should have unique equipment and supplies to facilitate that stage of the process. One general goal should be creating a plan that keeps ballots and ballot envelopes organized as they are moved through each stage of processing. This can be done by ordering colored mail trays, one for each stage, or by using large colored mail tray labels. In addition to purchasing **mail trays** you will need:

- Mail tray carts or mail cages on wheels
- Carts that can be locked and sealed (in lieu of secure storage rooms)
- Signs that can be attached to carts showing contents and status
- Folding tables and chairs (can be rented)
- Ballot storage containers (post-scanning)
- Colored vests or lanyards to designate who is working in what area (if vests are worn by temporary workers, you have to consider laundering the vests while lanyards are easier and cheaper (as long as the lanyard itself is not caught or tangled in the work process).
- Large signs designating each processing area along with visual charts displaying the steps in each individual processing stage.

Timeline: These purchases should be made as soon as you have a good estimate of the volume of ballots to be processed. Ideally, supplies should be on hand by the time you conduct training and practice exercises—typically 30 to 90 days before the election.

What is the best way to provide transparency and accommodate poll watchers or others who want to view inbound ballot processing?

Establishing a formal observation area for poll watchers is helpful. If no area is set aside for them, consider using tape to delineate “areas” on the floor. This ensures poll watchers can observe without interfering with operations. In addition, consider:

- Publishing the [steps of each process](#) or providing a [ballot lifecycle chart](#).
- Posting signs visible from the “watcher” area to designate each processing area.
- Using different color-coded lanyards, badges, or vests to designate poll watcher as well as the workers in each individual processing area.
- Assigning a member of staff to answer questions or stop a process if a watcher has concerns or wants to issue a challenge.
- Setting a schedule for performance of each stage of the process so observers can plan for watching the stages important to them (especially important if not all stages are performed every day).
- Live streaming ballot processing (e.g., via Facebook Live, Twitter, Instagram Live, YouTube mobile).

What if you need to purchase ballot sorting equipment or a large number of central count scanners and your jurisdiction’s RFP process is 4-5 months? Is there a way you can bypass those procurement requirements to get the equipment you need now?

Work with your Purchasing Department to determine whether your state participates in a cooperative purchasing alliance or you can take advantage of a [cooperative contract](#). A similar option would be the [GSA Cooperative Purchasing Program](#). Check whether your vendor is an approved industry partner in this program.

Some other considerations to improve the procurement process include:

- Detail all current contracts in a single place, listing the existing terms.
- Hold meetings now with your government partners—procurement, finance, legal—that can help you modify existing contracts and also help you negotiate new contracts quickly.
- Move quickly to define the new or changed specifications, such as new ballot storage racks or additional ballots that must be scanned centrally. Working through this document should guide you on the path to identifying new gaps.

- Within the confines of your procurement requirements, begin work with your vendors as soon as possible.

Timeline: Anticipate you will have problems with procurement—supply chain issues may impact availability. The decision to expand mail ballot voting must be made sooner rather than later to ensure your ability to purchase or rent the necessary equipment. Problems will be vendor and equipment specific but typically you should start 140 days before the election.

Are there options to share ballot envelope sorting equipment and central count scanners?

The ability to procure and install equipment and/or the cost of that equipment might be a reason to consider partnering with a nearby election authority or creating a state or regional processing center. This type of arrangement can also benefit those jurisdictions that are limited in the amount of staffing and space available. Such an arrangement places all inbound processes in one shared location.

That said, in addition to the legal issues, there are some logistical issues associated with “sharing” equipment that should be considered. These include:

- How will equipment be programmed to account for different ballot designs and different elections?
- How will chain of custody be maintained for ballot packets as they are transferred to and from a shared facility?
- When will each party to the sharing agreement get to use the equipment?
- Who is responsible for equipment security and maintenance?
- How will ballots be sorted by county for permanent retention?

How do you plan to transfer and track ballots?

It is important to have a plan for tracking the transfer of ballots as they move through each stage of the Inbound process. Your plan starts with designating where each stage will take place. Having a separate room that can be secured by badge or key access is ideal. If not, delineate a section of your office or warehouse for each of the stages described below.

Some considerations as you begin planning include:

- Create a system for batching envelopes and ballots and attempt to keep the quantities uniform.
- Create a ballot tracking form that stays with a batch of ballots throughout each stage of the process from the time ballots are checked in and placed in batches until they are scanned into the voting system. This form should include a section representing each stage of the process where the total number of envelopes or ballots is verified and the names of those verifying the piece count are recorded.

- ❑ Consider color coding—the trays, the carts, the room sign, etc. The color of the tray, etc. indicates the stage in the process in which that particular batch resides.
- ❑ Always require each section of the ballot tracking form to be signed off by two people.
- ❑ Assign leads or managers to consistently review ballot tracking forms, chain of custody forms, and other ballot accounting documents.
- ❑ Conduct an audit of the process to ensure compliance.

Ballot Receiving

The ballot receiving process starts when mail ballots are delivered to the central processing facility. These can be ballots delivered directly by USPS, but more likely they will be ballots picked up from drop boxes and USPS facilities by your ballot collection teams. In addition to voted ballots, you will also receive undelivered ballots from USPS. These ballots should be processed according to state law and securely stored as part of the official election records.

What are the steps in the ballot receiving process?

1. Ballot collection bags and boxes are checked in, and security seals are confirmed before opening the collection bags and boxes.
2. Chain of custody forms are completed.
3. Ballots need to be securely transferred from mail bags and portable ballot boxes to mail trays.
4. At some point before or after the transfer of envelopes to mail trays, ballots in their box or tray are weighed for an approximate piece count and the data recorded for each ballot drop-off location and/or USPS.
 - a. *Alternative:* Hand-count the quantity of envelopes if not using a scale or to test accuracy of the scale.
5. Ballot boxes should be inspected to ensure they are empty before being prepared to go back out again.

How much space will you need?

Ballot collection teams have unique space requirements during ballot receiving. They will be arriving to the central processing facility with their vehicles full of ballot boxes. Thinking about a secure (and socially distanced) way to transfer those ballot boxes from their vehicles to your processing area should be the first thing to consider when thinking about space. Some unique approaches have been passing the box through a window (like a drive-through) or backing the vehicle into the warehouse space before unloading. Whatever your constraints are, think about problems such as inclement weather and the distance that will need to be traveled (those boxes or bags can be heavy).

Next, consider establishing an area that will allow you to set up multiple folding tables with plenty of space between them. Ballot collection teams will need space for their ballot box and

multiple mail trays to which they will transfer the ballots. This is most efficient if you have room for several people at a time to move the contents of the ballot boxes to trays and weigh them for a piece count during the process.

Also consider that you will most likely be receiving ballot packets returned undelivered by the post office. These will need to be checked in at some point so you can go through the normal list maintenance process for these voters. You will also need a place to store them.

How many people will you need?

Generally, your ballot collection teams can handle the transfer of envelopes from the ballot collection boxes into the mail trays without any additional assistance. On Election Night, when the volume of ballots coming in is greater and more frequent (assuming you do multiple pickup runs throughout Election Day, which is recommended), it is helpful to temporarily move workers assigned to other “stages” to help. This also means you will need extra space.

What equipment and supplies do you need for ballot receiving?

Due to the physical nature of this process, there is little equipment to purchase. Most of the work is done by temporary workers and staff. In addition to purchasing mail trays, carts, and folding tables, you will need a digital postal scale to estimate the piece count of the number of ballots that have been returned from what location. Ideally, find a floor scale or one that has the display on an extended arm.

Ballot Verification

The steps listed here can be performed manually or by mail ballot sorting equipment. The ballot verification process is one where sorting equipment can dramatically decrease the processing time and number of people you will need to staff this stage of the Inbound Ballot process.

What are the steps in the ballot verification process?

1. Sealed returned ballot envelopes are date and time stamped.
2. Ballots belonging to another jurisdiction are sorted out to be forwarded to the appropriate counties for processing.
3. Information from the ballot return envelope is recorded in the voter registration database.
 - a. This can be accomplished using manual data entry but is more efficient if a barcode with the voter ID from the voter registration is included on the ballot return envelope for scanning.
 - b. This process ensures the voter is credited for voting and prevents them from submitting another mail ballot or voting in person.
4. Ballots are grouped into batches, and a ballot tracking form is assigned to the batch.

5. Where required by law, signatures on sealed ballot return envelopes are captured and reviewed by bipartisan teams either manually or using automated equipment (see the *Signature Verification and Curing* document for more details.)
 - a. Voter records are updated to indicate whether the signature was accepted or rejected.
 - b. Ballot envelopes are sorted by signatures accepted and rejected.
 - c. Rejected ballots are moved to the Signature Cure process if allowed by state law.
6. Accepted return envelopes are sliced open, grouped into a uniform batch size, and moved to Ballot Preparation.
 - a. The predetermined batch size will be used throughout the rest of the Inbound Ballot process.
 - b. Determine the batch size by considering: 1) the maximum number of ballots the ballot scanner tray can hold, and 2) how many ballots the average person can comfortably handle. Note: 100–200 ballots per batch is a good size for ballots being scanned on central count scanners.

How much space and how many people will you need?

The biggest determining factor here is whether you use a mail ballot sorter or rely entirely on a manual process. A mail ballot sorter's space footprint depends on the size and model but will require fewer people.

For a manual verification process, you will need to consider making room for an envelope slicer (recommended) along with workstations connected to the voter registration database for each person who will be processing batches of returned envelopes.

To estimate how many people you will need and how many workstations, consider the time for conducting signature verification (see above and the *Signature Verification and Curing* document for more details), as well as the time to sort out ballots that belong to another jurisdiction, sort your jurisdiction's ballots into predetermined batch sizes, and put the accepted ballots through the slicer. This is an area where time studies on test ballots will help you make a better estimate of the number of people and space needed.

What equipment and supplies do you need for ballot verification?

- Mail ballot sorter—this will date stamp ballots as they are scanned.
- Storage racks to hold mail trays with ballot envelopes.
- Mail trays to store ballots as they are sorted.
- Tracking sheets, or a computer dedicated to tracking batches.
- Envelope slicer (if not performed by the ballot sorter).

If you do NOT plan to purchase a mail ballot sorter, you should consider purchasing the following in addition to the other items listed above:

- Automatic date/time stamp.
- Bar code wands.
- Workstations connected to the voter registration database.

Ballot Preparation

What are the steps in the ballot preparation process?

1. Verify envelope quantity on ballot tracking form.
2. Remove the ballot from the envelope (and any inner envelope or secrecy sleeve if used) in a way that prevents the Ballot Preparation team from seeing the voter's identity.
3. Remove any stray stubs left on the ballot.
4. Prepare the ballot for scanning by flattening/backbending the folds so the ballot lays flat.
5. Perform a piece count on the extracted ballots and ensure it matches the envelope count for that batch (note any discrepancies on the ballot tracking form such as an empty envelope or two ballots in one envelope).
6. Place the ballots in a mail tray.
7. Complete ballot tracking forms.
8. Securely transfer ballots to Ballot Scanning.
9. Run a zip tie through the envelopes to ensure they are empty (not ballots left in envelope) and place them in storage.
10. Place secrecy sleeves, stubs, etc. in temporary storage. Nothing should be thrown out from Inbound Ballot Processing until the date for challenging an election has passed.

How much space and how many people will you need?

Unless you are using a vacuum extraction system to automate the process of removing ballots from return envelopes, this process requires the most space of any stage in the Inbound Ballot Process. Normally, bipartisan teams of two would perform this process on a single banquet-size folding table with two chairs. With the need for social distancing, you will most likely need to arrange workers one to a table--requiring even more space.

Batches of 100 envelopes with ballots in an inner secrecy sleeve can be extracted manually, flattened, stub removed, and a piece count determined in about 20 minutes by one team. Therefore, it is very important to run time studies in a practice environment.

If you have space to set up extra tables and chairs, you should do it even if you do not plan to hire enough people to fill all of the seats. This is an easy job to learn and is prone to be a bottleneck in the process. When that happens, having the space and tables to bring all hands-on deck will help speed up the process.

What equipment and supplies do you need for ballot preparation?

In addition to purchasing or renting folding tables and chairs to accommodate your Ballot Preparation teams, you will need:

- Transfer case or mail trays.
- Rubber fingers or finger moistener (if ballot quantities are being verified manually).
- Paper scanner or scale (to automate piece count).
- Vacuum extraction system.
- If ballots will not be immediately transferred to Ballot Scanning, consider a secure ballot storage area or locking cart.

Ballot Scanning

It is important to note that the act of scanning is not the act of tabulating. Just like precinct scanners used for in-person voting, central scanners read the marks on ballots indicating a voter's choice for each contest. Ballot scanning in a central environment is simply another step in the Inbound Ballot process. Election officials do not aggregate and report results until after the polls are closed.

In addition to physically scanning batches of ballots, ballot scanning often involves separate but parallel functions of ballot duplication and ballot adjudication.

What are the steps in the ballot scanning process?

1. Verify ballot quantity on ballot tracking forms.
2. Scan ballots using central count scanners or precinct scanners.
3. Verify and record total ballot quantity scanned using information from the voting equipment.
4. Duplicate ballots that are damaged or have identifying marks (reasons for duplication will vary by state).
5. Perform adjudication for voter intent as necessary (will be done electronically or by duplicating ballots).
6. Complete the necessary labels and logs to account for batch numbers, quantities, and seal storage containers.
7. Securely transfer scanned ballots for storage.

How much space and how many people will you need?

These resources will ultimately depend on whether you use central count scanners or precinct scanners. Also, in some states the ballot duplication and ballot adjudication process must be witnessed or performed by the canvassing board which will require additional space and staffing considerations not addressed here.

- Central count scanners will take less space and fewer key operators.
- Precinct scanners will take more space and more operators, especially considering social distancing rules.

What equipment and supplies will you need for ballot scanning?

- Ballot scanners (central count or precinct count models)
- Ballot marking devices (optional to assist with duplication)
- Building infrastructure and power requirements are important to meet the needs of the scanning equipment. This is especially true when you have extra scanners (central or precinct scanners) consolidated in a small area.
- Large work surfaces (tables or desks) are needed to accommodate a central scanner and the incoming tray of unscanned ballots, along with the transfer case or storage box for the scanned ballots.

What are the tradeoffs between purchasing central count scanners and using existing precinct scanners?

Central count scanners offer the advantage of speed and scalability. They have the advantage of requiring fewer people to operate them. Fewer scanners also means greater control of the transfer of ballots from preparation to scanning and the additional processes such as duplication and adjudication that may occur during scanning. The lower per minute speed of precinct scanners means you will need more of them to do the same job as a central count scanner. The more machines you use, the more people you need, along with more space for social distancing.

The space and power requirements for a large number of precinct scanners running in a single location should not be discounted. More equipment and people spread out over a larger area also means a greater threat surface; more area that needs to be secure; and more area and devices that need to be sanitized and accessible to poll watchers—all with solid workflows and controls to ensure ballots are accounted for. Precinct scanners may also limit you to printing ballots by precinct only and not by ballot style, which can slow down the ballot receiving process. It is imperative that you consult with your voting equipment vendor as you build your Inbound Ballot processing plan.

Ballot Duplication

Ballot duplication is the process for replacing damaged or improperly marked ballots (i.e. the voting system cannot read the ballot) with a new ballot that preserves the voter's intent. When expanding voting by mail, you need to think about making the duplication process more efficient. More hand-marked paper ballots means more opportunity for damaged ballots, either damaged

by the voter or by USPS processing, or ballots requiring duplication because of identifying marks. Some things to consider:

- Will you be using preprinted blank ballots or a ballot on demand (BOD) system?
 - If using a BOD, are you planning for the necessary ballot stock and toner?
- Have you created duplication logs and ballot labels (for original ballot) with pre-filled control numbers?
- Have you considered using an ink stamp to create a template for adding the control number and initials on the duplicated ballot?

There are systems that can help automate the duplication process. These were developed mainly to assist with duplicating UOCAVA ballots returned electronically but their use should be considered as duplication needs increase. These systems include using a ballot marking device to create a scannable ballot or QR codes coupled with BOD systems. Some voting systems also have an inline system that could be leveraged.

Ballot Adjudication

An increased quantity of hand-marked paper ballots will generate a need for ballot adjudication teams. If your current voting system supports electronic adjudication, then you already have this covered. Scaling up may simply involve hiring and training additional teams to perform this function. You may also need to procure more workstations to accommodate the teams. If you use a manual adjudication process, the ballot duplication considerations listed above are vital to think about.

Statewide voter intent guidelines are an important element in the adjudication process, whether it is manual or electronic. Having a large chart with examples posted near the adjudication stations increases transparency and reinforces what was covered in training. You can find links to voter intent training from Washington and Colorado in the *Additional Resources* section.

Post-Election Audits

Because vote-by-mail creates an auditable paper record post-election auditing of these ballots is an important step in the process. When all of your ballots are scanned centrally, and you include the practice of logging and labeling each scanned batch, much of the work has been done to allow you to perform a ballot comparison, risk-limiting audit (RLA) if that is allowed by your state law and practical for your operation. For more information please see [Knowing It's Right Part 2: Risk-Limiting Audit Implementation Workbook](#) (pp. 21–23) which walks you through the steps of preparing for and conducting a ballot comparison RLA.

Security Considerations

Your physical and cyber security plans will continue to play an important role in the integrity of your election. As your physical footprint expands, so does your risk. Going back to those plans and reevaluating best practices is even more critical if you plan to move your Inbound Ballot processing to different buildings or use additional rooms in your current facility.

For a full list of CISA services see the [CISA Election Infrastructure Security Resources Guide](#). To request services from CISA, email CISACustomerService@cisa.dhs.gov. Each of CISA's services is provided at no cost to election jurisdictions and their 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. Some of CISA services and security best practices include:

- Invite your regional Cybersecurity and Infrastructure Security Agency (CISA) Physical Security Advisor (PSA) for an [Assist Visit](#).
- Work with your PSA after the visit to fill out the [Infrastructure Survey Tool](#) (IST) to identify and document the overall security and resilience of the facility.
- If inbound processing equipment does not need to be internet connected, or if internet connection is not necessary for the processing of election material, physically and logically disconnect it.
- Obtain outside cybersecurity assessments, such as CISA vulnerability scanning and remote penetration testing.
- Develop a vulnerability disclosure program (VDP). 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.
- 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, ensure it uses SFTP.
- Placing voter portals on a government TLD, preferably .gov.

Additional Resources

- [Oregon VBM Procedures Manual](#)—Created by the Oregon SOS
- [Determination of Voter Intent for Colorado Elections](#)—sample voter intent guide from Colorado Secretary of State
- [Voter Intent: Statewide Standards on What is a Vote](#)—sample voter intent guide from Washington Secretary of State

- ❑ [Best Practices for Ballot Accounting & Reconciliation](#)—best practices from the Brennan Center on paper handling and reconciliation

- ❑ [Voting Outside the Polling Place: Absentee, All-Mail and other Voting at Home Options](#)—NCSL webpage dedicated to absentee voting and all-mail voting