

# Status Update: Elections Ballot Security

Updated Processes for Ballot Security

August 2024

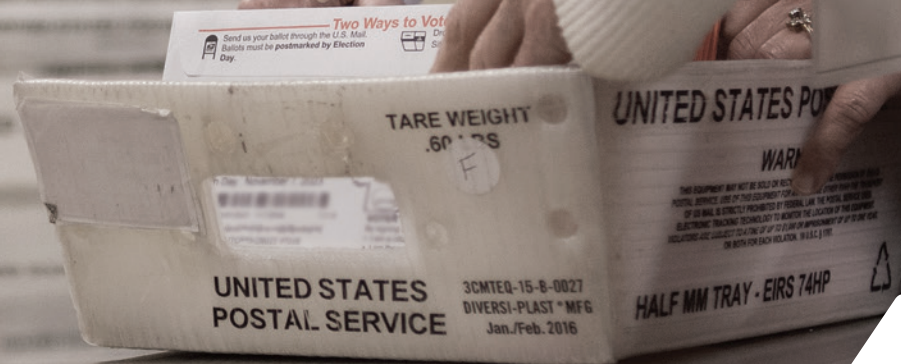
Report by the Office of County Internal Audit

Jodi Cochran, CPA, CIA, CGMA, CRMA  
*County Internal Auditor*

Kathy Yeung, CPA, CIA  
*Senior Internal Auditor*

Minh Dan Vuong, Chair  
*Internal Audit Oversight Committee*

Brian T. Nava  
*County Treasurer*



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# **I. Executive Summary**

# I. Executive Summary



## **All recommendations from the 2021 Elections Ballot Security Audit have been implemented**

In 2021, the Office of County Internal Audit conducted an [Elections Ballot Security Audit](#) focusing on physical security and safeguarding controls for ballot return envelopes during the May 18, 2021 Special District Election held in Clackamas County. Former County Clerk Sherry Hall and the Elections Division team agreed with two of the four recommendations included in the September 2021 report.

After being elected Clackamas County Clerk in 2022, Clerk Catherine McMullen, issued a revised response, agreeing with all recommendations, and requested an updated evaluation. The Office of County Internal Audit conducted the Status Update: Elections Ballot Security Audit during the May 21, 2024 Primary Election held in Clackamas County, focusing on the implementation status of the four 2021 recommendations.

All four recommendations have been resolved. Detailed observations are included in this report.

### **Proactive Efforts**

County Clerk Catherine McMullen and Elections Manager Justin Larsen, as the primary engagement contacts, have contributed their time and effort to provide access to the information and data cited. These contributions significantly supported the completion of this review. Collaborative efforts are vital to the county's ability to successfully meet objectives, as well as identify, thoroughly analyze, and appropriately respond to risks. We demonstrate our core values, [SPIRIT](#), when we collectively and proactively identify steps to streamline processes, strengthen controls, and mitigate risks.

Special thanks to County Clerk Catherine McMullen, Justin Larsen, Tiffany Clark, Qi Richmond, and the elections team for their contributions and support for this engagement; Mark McBride and Dylan Blaylock with the Public & Government Affairs department for their assistance in the report design, formatting, and conducting post-audit administrative tasks.

## **II. Background**

## II. Background

### Overview of the 2021 Audit

In 2021, the Office of County Internal Audit conducted an Elections Ballot Security Audit (#2021-03)<sup>1</sup> focusing on the physical security and safeguarding controls and processes in place to effectively receive returned ballot envelopes, process returned ballots, and to complete election result tallies. This audit was narrowly scoped and evaluated the May 18, 2021 Special District Election held in Clackamas County. Four recommendations were made to address physical security and chain of custody enhancements. Former County Clerk Sherry Hall and the Elections Division team agreed with the two physical security recommendations and disagreed with the two chain of custody recommendations in the 2021 report.



#### Physical Security

1. Require both ingress and egress door access scans
2. Secure loading dock door



#### Chain of Custody

1. Enhance receipt protocols for damaged or non-standard return envelopes
2. Confirm inspection control log batch reconciliations

#### Physical Security

-  Require both ingress and egress door access scans
-  Secure loading dock door

#### Chain of Custody

-  Enhance receipt protocols for damaged or non-standard return envelopes
-  Confirm inspection control log batch reconciliations

<sup>1</sup> [Elections Ballot Security](#): Observers welcome – Chain of custody enhancements will further support a transparent ballot processing environment (Report #2021-03)

## II. Background

Key observations from the 2021 audit report included:

- Temporary election workers did not routinely scan their unique access badge when entering or leaving the ballot processing areas during the May 18, 2021 Special District Election.
- Two of the three access doors to the receiving, sorting, and signature verification areas were frequently opened without monitoring during the May 18, 2021 Special District Election.
- Custody control gaps existed in the receiving processes of return envelopes during the May 18, 2021 Special District Election.
- Opportunities to clearly document the reconciliation of ballots separated from returned envelopes to scanned ballots existed during the May 18, 2021 Special District Election.

### Changes in the Clerk's Office and the Elections Division

County Clerk Catherine McMullen took office in January 2023 and a revised management response<sup>2</sup> was released in March 2023. After reviewing the 2021 Elections Ballot Security Audit report, County Clerk McMullen agreed with all four recommendations. The County Clerk requested an assessment reflecting changes in staffing and processes in the Office of the County Clerk. The Office of County Internal Audit conducted the Status Update: Elections Ballot Security Audit during the May 21, 2024 Primary Election held in Clackamas County, focusing on the four recommendations from the 2021 audit engagement.



**County Clerk Catherine McMullen,**  
*County Clerk as of 2023*

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<sup>2</sup> [2023 Revised Management Response](#)



# III. Observations

# III. Observations

## Ballot Lifecycle

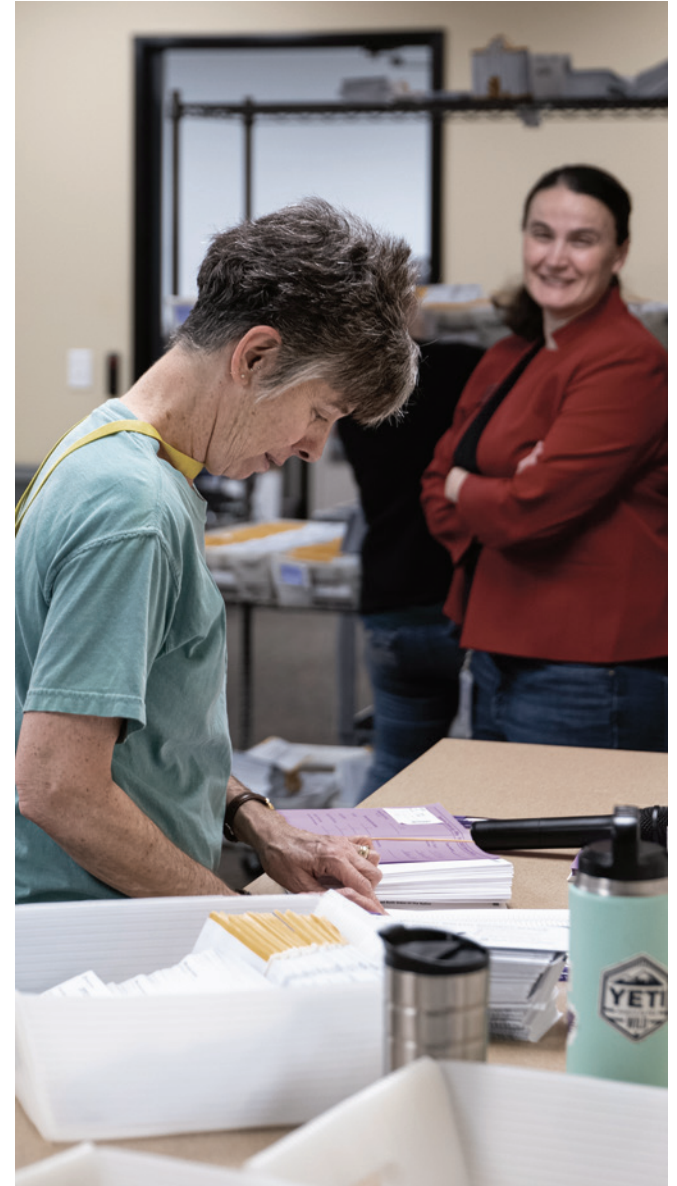
Clackamas County Elections informs voters, candidates, political parties, cities, special districts, and others about administrative rules and statutes applicable to election laws. The Elections division of the Office of the County Clerk oversees election filing, forms and voter registration. The Elections division also prepares ballots and voters' pamphlets, receives and processes returned ballots, and completes election result tallies.<sup>3</sup> Clackamas County's ballot processing follows laws, rules and directives established in Oregon Revised Statutes, developed by the Secretary of State and published in the Vote by Mail Procedures Manual<sup>4</sup>. Key ballot processing steps include:

- Receiving Voted Ballots
- Sorting & Counting
- Signature Verification
- Envelope Opening
- Ballot Inspection
- Ballot Scanning & Counting
- Ballot Adjudication

In all stages of ballot processing, return envelopes and ballots are handled by at least two or more sworn election workers (i.e., dual custody) to ensure appropriate safeguarding measures; one election worker is never alone with unsecured envelopes/ballots. Additionally, surveillance cameras in the processing room provide

<sup>3</sup> [Clackamas County Clerk Website](#)

<sup>4</sup> Oregon Secretary of State - [Vote by Mail Procedures Manual](#), Rev. 03/2024



# III. Observations

an additional level of physical security, monitoring, and tracking of return envelopes and ballots.

## Receiving

Ballot envelopes can be returned through the mail or at any official ballot drop site.<sup>5</sup> Sworn election workers retrieve ballot envelopes in teams of two to ensure dual custody throughout transportation. Ballot envelopes from the official ballot drop sites are transported in secured totes. Ballot envelopes from the post office are transported in United States Postal Service mail trays.

## Sorting & Counting

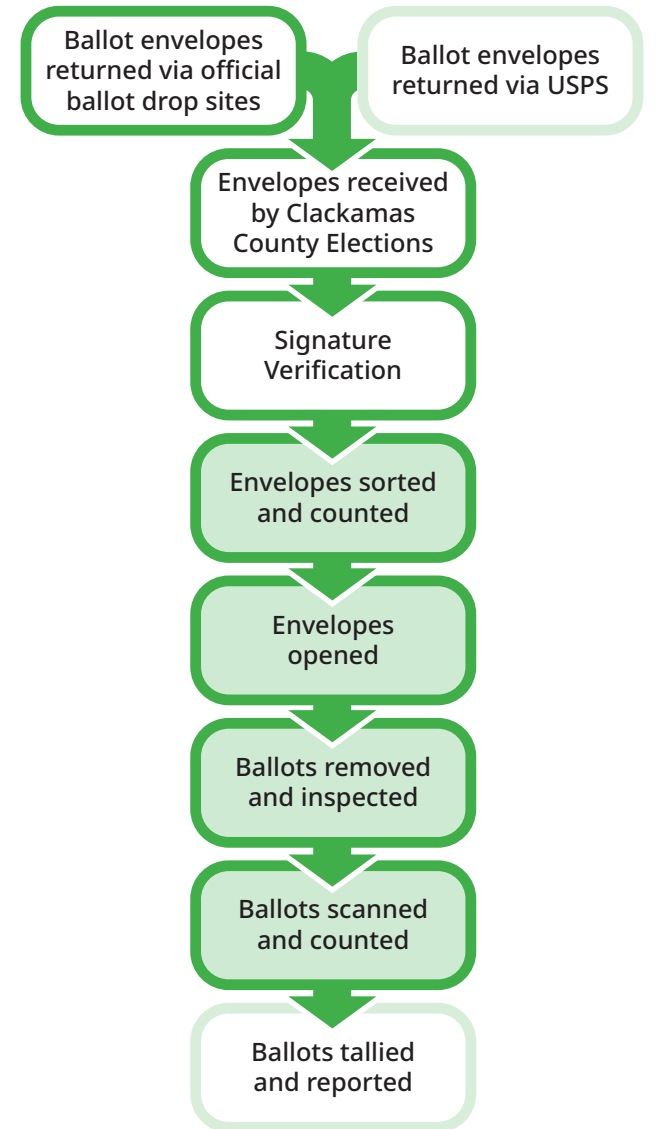
At the elections office, sworn election workers open the secured totes. Non-election mail and ballots from other jurisdictions are kept in separate trays. Ballot envelopes are moved from the totes into trays and arranged to face the same orientation for efficient processing when fed into the ballot sorter.

The ballot sorter takes a picture, capturing the signature and barcode on each envelope, and it checks the envelope for thickness. The ballot sorter will update the status of the ballot (i.e., received, accepted, challenged) through the Oregon Centralized Voter Registration system. Ballot envelopes are sorted into batches of no more than 200 ballot envelopes. From there, they are moved into trays and staged on a rack noting they are in the signature verification stage.

## Signature Verification

Sworn election workers receive signature verification training from the Oregon Secretary of State's Office. Signatures on the ballot envelope are compared to the signature on the voter's most current registration record. The review of the signatures

<sup>5</sup> Clackamas County [Official Ballot Drop Sites](#)



● Process within scope of audit ● Reconciliation performed

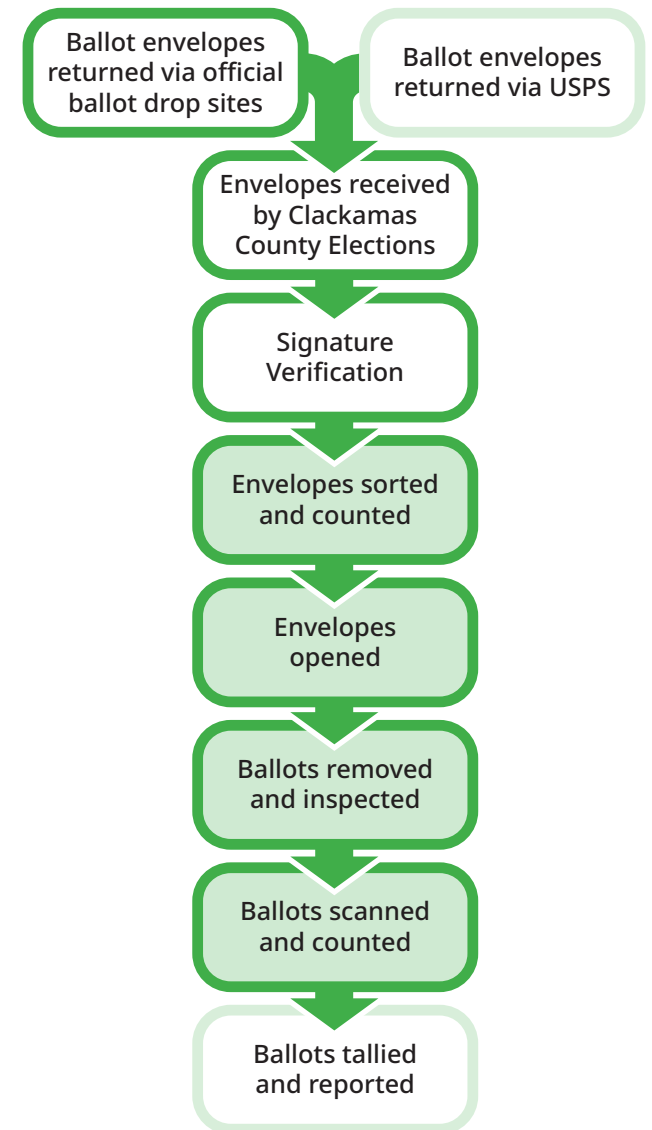
### III. Observations

is done on the computer and not by handling of the physical envelopes. If the signature matches and is valid, the ballot is accepted and the ballot envelope moves onto the next stage. If there is no signature on the ballot envelope or the signature does not match, the signature is reviewed a second time by a senior election worker. If the signature is missing or does not match, the ballot is challenged and a letter is mailed to the voter so that they can cure their challenged signature and have their ballot counted. If the voter is signed up for the Track Your Ballot<sup>6</sup> service, the voter will be able to see this change of status.

After signature verification is completed, the ballot envelopes are fed through the ballot sorter a second time, sorting accepted ballots and challenged ballots into different batches. Envelopes are then sorted into batches of no more than 150 envelopes. An election worker moves the envelopes from the ballot sorter into a tray with a tray tag attached; the tray is staged on a rack noting the status as “ready to open.” Challenged ballots are segregated and placed on a different rack noting the status as “challenged.”

#### Envelope Opening

Accepted ballots move on to the envelope opening process. Next to the receiving processing area is a room with the envelope opening machine. This machine cuts the top of the ballot envelope to create an opening. A team of two sworn election workers work together when operating the machine. A surveillance camera is located inside the room and connected to the TV in the observation lobby to add transparency throughout the ballot process. The ballot envelopes are placed back in the tray and moved onto a new rack with the status as “ready for boards.”



○ Process within scope of audit    ● Reconciliation performed

6 Clackamas County [Track Your Ballot](#)

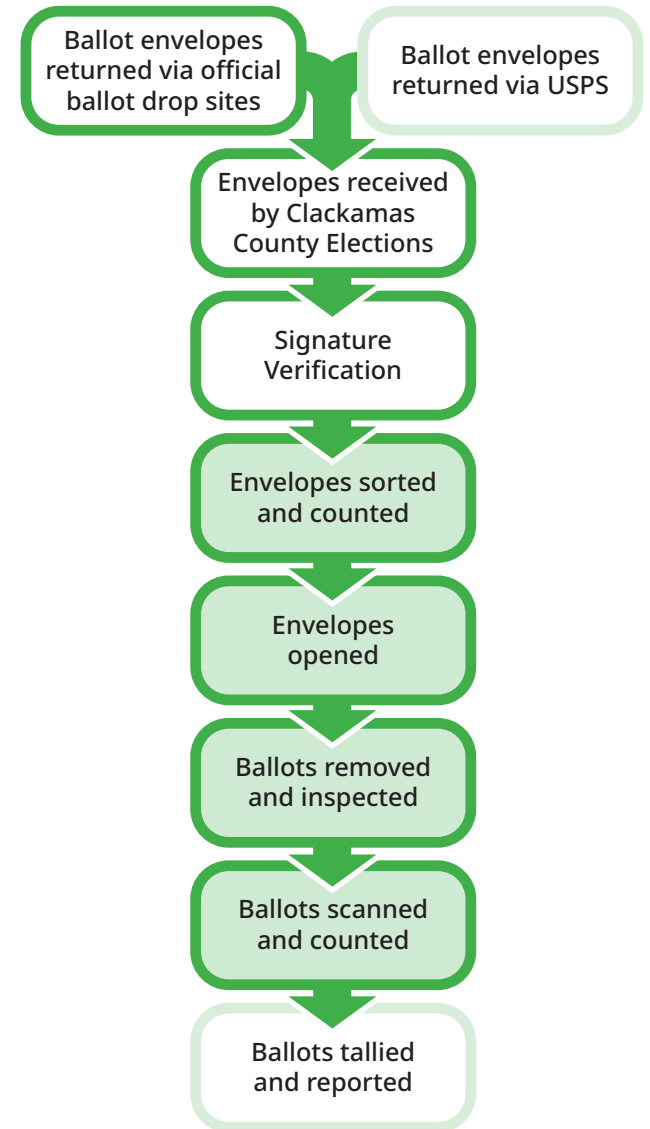
# III. Observations

## Ballot Inspection

A tray of ballot envelopes is given to each table of sworn election workers in teams of two to four from at least two different political affiliations<sup>7</sup>. Election workers prepare the inspection control log by manually counting the number of ballot envelopes in their stack to ensure the total matches the number of envelopes stated on the tray tag. Ballot envelopes are counted and processed with the signature side facing down to ensure privacy. Once the table agrees the numbers match, the ballots are separated from the envelopes.

Ballots are unfolded and inspected for any markings which would cause the machine tally system to be unable to read the voter’s intent. This machine tally system totals the votes casted; see the Ballot Scanning and Counting section below. Ballots with these stray markings are set aside to be duplicated. If more than one ballot is found in a return envelope, both ballots are rejected. Rejected ballot envelopes are archived according to retention rules.

Empty envelopes are secured with a rubber band with the batch number written on the top of the envelope and set aside for storage. The election workers complete the inspection control log by writing the number of ballots rejected from the batch due to multiple ballots in one envelope, no ballots, wrong or previous elections, or if the ballot needs to be duplicated. At the bottom of the inspection control log, the election worker writes the total number of ballots to be tallied. All team members sign the inspection control log and attach it to the top of the ballots secured by a rubber band. These ballots with the status “ready to be scanned” are staged on the rack near the tally room.



<sup>7</sup> Election worker political affiliations are noted by colored lanyards visible to public observers.

# III. Observations

## Ballot Scanning and Counting

Scanner operators, who are sworn election workers of different political affiliations, overseen by a supervisor, feed the ballots into scanner machines in the tally room one batch at a time. The unique serial number printed on each ballot ensures only ballots issued by Clackamas County are sent through the scanners and that ballots are not scanned more than once. None of the computers in the tally room are connected to the internet, including the scanner machines. Data is transferred to the central count machine through encrypted USB drives.

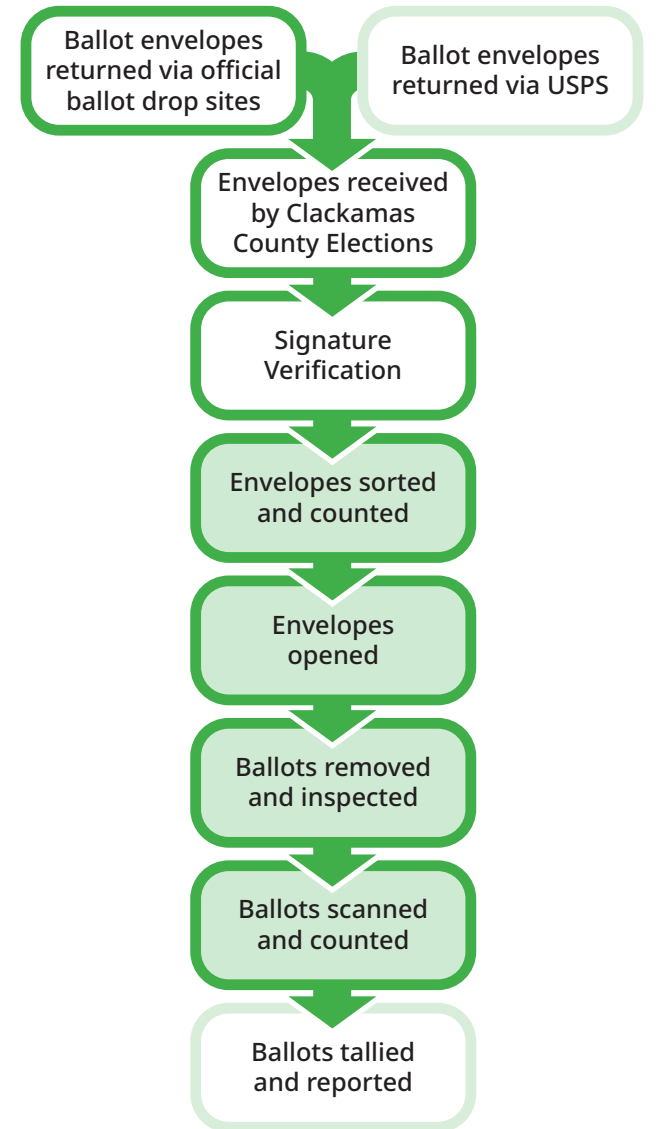
In the case where there are ballots that cannot be scanned due to issues such as damage to the barcode, rips, or food spills, the sworn election worker will separate the ballot and set it aside to be duplicated. The scanner operator will note this on the inspection control log and on the scan log.

The system tells the scanner operator how many ballots are accepted and how many are rejected by machine scanner. If a ballot cannot be scanned by the machine, it is set aside to be duplicated. The scanner operator writes the number of ballots scanned on the inspection control log to reconcile it to the number of ballots to be tallied as noted by the ballot inspection team. The scanner operator then places the completed inspection control log and the scanned ballots into a retention box.

## Ballot Adjudication

When the machine ballot scanners are unable to determine the intent of the voter, the ballots go through an adjudication process by ballot resolution teams consisting of two sworn election workers of different political affiliations. Resolution involves examining an image of each ballot contest that the system detected as containing:

- An overvote – there are more boxes marked than eligible in the contest
- An undervote – there are fewer boxes marked than eligible in the contest
- A write-in vote – the voter writes in a name of a candidate



● Process within scope of audit ● Reconciliation performed

### III. Observations

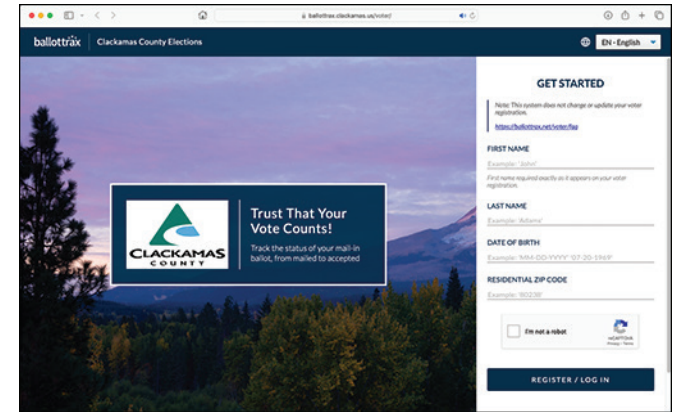
If the machine system cannot read the voter’s intent, election worker resolution teams make indications on the ballot image on the computer to accurately capture the voter’s choices. Changes are not made to the actual ballot itself, only to an electronic image of the ballot. In the case of a recount, the actual paper ballot is counted by hand by sworn election workers as part of a recount team.

#### Public Observation

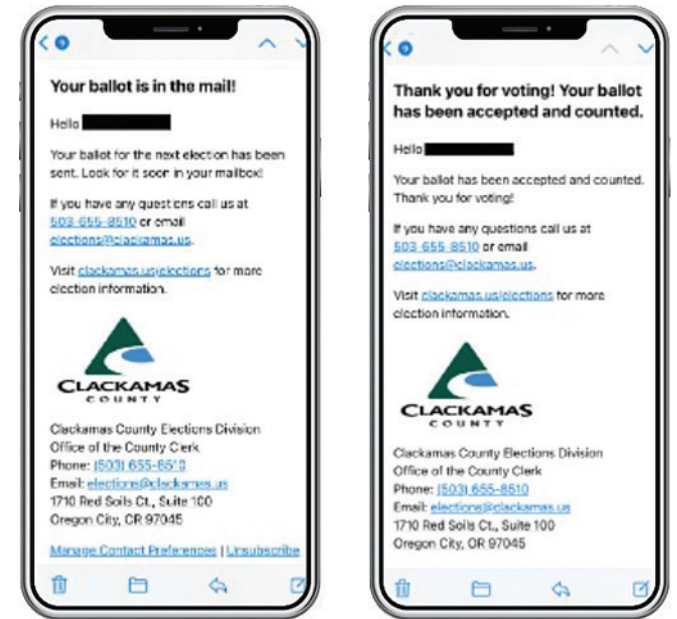
In the public observation lobby at the Clackamas County Elections building, community members can observe the entire ballot process flow from receipt to archive. The continuously forward flow of the processing steps provides clear insight and the opportunity to better understand the ballot life cycle. While observers are not allowed in the secure processing areas, elections supervisors are available to answer questions and address observations. The public observation lobby is open whenever ballot processing is occurring. The observation schedule can be found on the [Clackamas County Elections website](https://www.clackamas.us/elections).

#### Track Your Ballot

Clackamas County residents can sign up for [Track Your Ballot](https://www.clackamas.us/elections/track-your-ballot)<sup>8</sup>, a free service alerting voters when their ballot is mailed and when it is accepted for counting. Voters can choose whether to receive alerts through text, phone, or email, as well as log in to see the ballot status. Since August 2023, more than 9,800 voters have signed up for notifications. During the May 21, 2024 Primary Election, 94.5% of voters who signed up for Track Your Ballot voted in the election. For more information, residents can sign-up for the free service on the Clackamas County Elections page at [www.clackamas.us/elections/track-your-ballot](https://www.clackamas.us/elections/track-your-ballot).



Source: <https://ballottrax.clackamas.us/voter>



Source: Provided by Office of County Internal Audit

8 [Track Your Ballot](https://www.clackamas.us/elections/track-your-ballot) Sign Up Page

## **IV. Status of 2021 Recommendations**



# IV. Status of 2021 Recommendations

## Physical Security



**Recommendation One:**  
**Require both ingress and egress door access scans**

**Status: Resolved**

Recommendation One from the 2021 Elections Audit report detailed the requirement of having both ingress and egress door access scanning protocol for any access to secured elections processing area. During the May 18, 2021 Special District Election, observations included:

- Temporary elections workers did not routinely scan their unique access badge when entering or leaving the processing areas,
- Personnel followed another staff member through an open door without scanning their access badge, and
- A door secured by key card access was propped open with a door jam<sup>9</sup>.

In the 2021 Elections Audit, management agreed with the recommendation. Since then, the Clerk's Office has implemented scan in/scan out protocol for all individuals with access to all secured elections processing areas. During the May 21, 2024 Primary Election, sworn election workers scanned their unique access badge when entering and leaving processing areas. No instances of "piggybacking" were noted in which election workers followed another staff member through an open door without scanning their access badge. In instances when temporary election workers didn't have their badges yet, they were escorted by an election worker to enter the processing areas. No doors were propped open.

<sup>9</sup> [Elections Ballot Security Audit](#), Report #2021-03



## IV. Status of 2021 Recommendations

### Physical Security

2

**Recommendation Two:  
Secure loading dock door**

**Status: Resolved**

Recommendation Two noted management should ensure all access doors to elections processing areas are closed and always locked. When the loading dock door — also known as the ballot intake door — is opened to receive deliveries, all other doors in the receiving, sorting, and signature verification area should be closed and locked. During the May 18, 2021 Special District Election, outside access doors were observed open or unlocked when not in use for deliveries. In the 2021 Elections Audit, management agreed with the recommendation.

During the May 21, 2024 Primary Election, the ballot intake door remained closed and locked, and a sign taped to the door reminded individuals the door should not be propped open. A doorbell and security camera connected to the TV on the inside have been installed and have increased the visibility of activity at the ballot intake door from the observation lobby. To ensure staff safety and security, a limited number of sworn election workers used the ballot intake door as an entrance and exit point.



## IV. Status of 2021 Recommendations

### Chain of Custody

3

**Recommendation Three:  
Enhance receipt protocols for damaged or non-standard  
return envelopes**

**Status: Resolved**

Recommendation Three stated management should “enhance receipt protocols for damaged or non-standard return envelopes.” During the May 18, 2021 Special District Election, non-standard or damaged return envelopes were not subject to the same level of chain of custody controls applied to the majority of return envelopes.

In response to the recommendation, processing standards were developed and implemented to address envelopes that could not be handled using the routine procedures. During the May 21, 2024 Primary Election, non-standard and damaged envelopes were placed in a dedicated tray on the rack where other standard envelopes were waiting to be scanned into the ballot sorter. Ballot envelopes belonging to other jurisdictions were placed in another designated tray. Any items that were not ballot return envelopes such as flyers or mail were placed in additional trays away from where the ballot envelopes were staged.

All non-standard ballot envelopes, damaged envelopes, and potentially hazardous items were handled by the elections manager. Non-standard ballot envelopes were manually entered into an Excel tracker, assigned a batch number and batched in a tray with the associated tray tag. These non-standard ballots were processed like standard envelopes through the opening and inspection processes.



# IV. Status of 2021 Recommendations

## Chain of Custody

4

**Recommendation Four: Confirm inspection control log batch reconciliations**

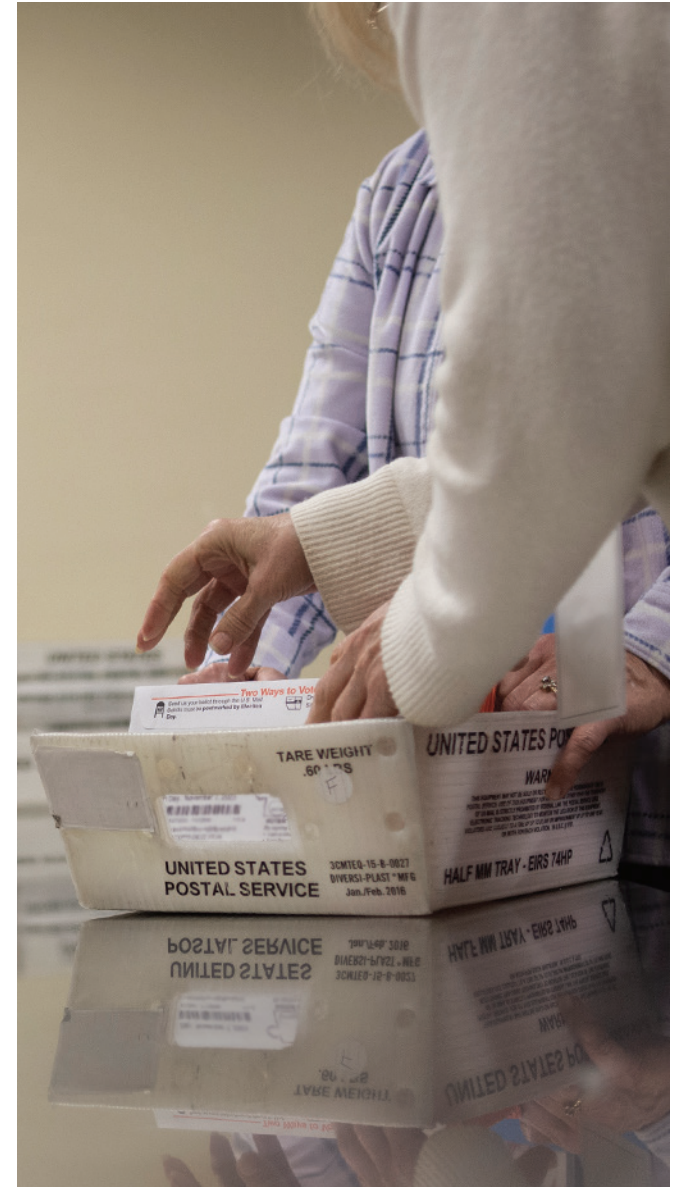
**Status: Resolved**

Recommendation Four suggested management enhance the inspection control log documentation and reconciliation process. The inspection control log is used by the opening and inspecting teams to document the batch of ballot return envelopes being counted. The log documents the total number of envelopes, empty envelopes, envelopes containing more than one ballot, ballots that need to be duplicated, and number of ballots to be scanned.

During the May 18, 2021 Special District Election, the Opening and Inspecting Table Instructions did not require a confirmation of the number of ballot envelopes to be opened or the number of opened envelopes through a hand count process.

Enhanced chain of custody procedures observed during the May 21, 2024 Primary Election, include:

- manual hand counts of envelopes prior to the separation of ballots from the return envelopes.
- enhanced inspection control logs that clearly document and reconcile the number of ballots to be tallied and the number of ballots that have been scanned.
- custody controls for non-standard ballot envelopes consistent with those for standard ballot envelopes.



# **V. Objectives, Scope and Methodology**

## V. Objectives, Scope and Methodology

In accordance with the Clackamas County 2023-2024 Audit Plan, the Office of County Internal Audit evaluated the May 21, 2024 Primary Election held in Clackamas County. County Internal Audit engagements are selected and designed to address high risk potential, while maximizing County Internal Audit resources and impact. Selection as a topic for an internal audit engagement does not mean the department or office is being managed ineffectively or policies and procedures are inadequate. It merely indicates that the services or functions the department is responsible for are, by nature, high priority activities with high-risk potential because of factors such as a large amount, or high degree, of:

- reported expenditures or revenues
- available liquid or protected assets, such as confidential data
- potential risks identified by management
- public interest

General objectives for the Status Update: Elections Ballot Security Audit engagement — consistent with the County’s values, strategies, and objectives — were to:

- Independently reassess the security and safeguarding recommendations from the Elections Ballot Security Audit report (#2021-03) supporting the processing of cast ballots (processing steps to include: drop site return intake, OCVR scanning, signature verification, sorting, opening, scanning, tallying, and storing).
- Independently reassess the potential risk of a mishandled or lost ballot, a miscounted ballot, or a ballot to be duplicated.



## V. Objectives, Scope and Methodology

- Advocate for continuous improvement through observations and recommendations.
- Create transparency for the County.

To achieve engagement objectives, the Office of County Internal Audit, among other engagement activities:

- Reviewed Oregon Revised Statutes chapters 171,198, 203, 204, 221, 236, 246 through 260; the Oregon Administrative Rules Elections Division – Chapter 165; the Vote by Mail Procedures Manual; and other directives issued by the Secretary of State.
- Reviewed State elections procedures, training, and guidance provided to staff.
- Conducted interviews with full-time team members within Clackamas County Elections.
- Observed official ballot drop site return intake, Oregon Central Voter Registration System scanning, signature verification, sorting, opening, scanning, tallying, and storing procedures throughout the May 21, 2024 Primary Election cycle.



# **VI. About the Office of County Internal Audit**



# VI. About the Office of County Internal Audit

## Our mission

Provide county leadership objective assurance, advice and insight to optimize county efforts and achievements.

## Our vision

The public:

- engages with an accountable, high performing, and transparent local government
- is confident that its interests are protected

## Our strategic objectives

The Office supports Clackamas County by:

- focusing on risks to county achievement
- promoting continuous improvement
- enhancing accountability and transparency
- fostering county SPIRIT
- building public trust



# VI. About the Office of County Internal Audit

## Our professional standards

The Office of County Internal Audit governs itself by adhering to The Institute of Internal Auditors' mandatory guidance, including the:

- Definition of Internal Auditing.
- Code of Ethics
- *International Standards for the Professional Practice of Internal Auditing*<sup>10</sup>.

The Office does not fully conform to the Standards to the extent the Office has not yet received an external review. Obtaining an external peer review is one of the Office's performance goals.

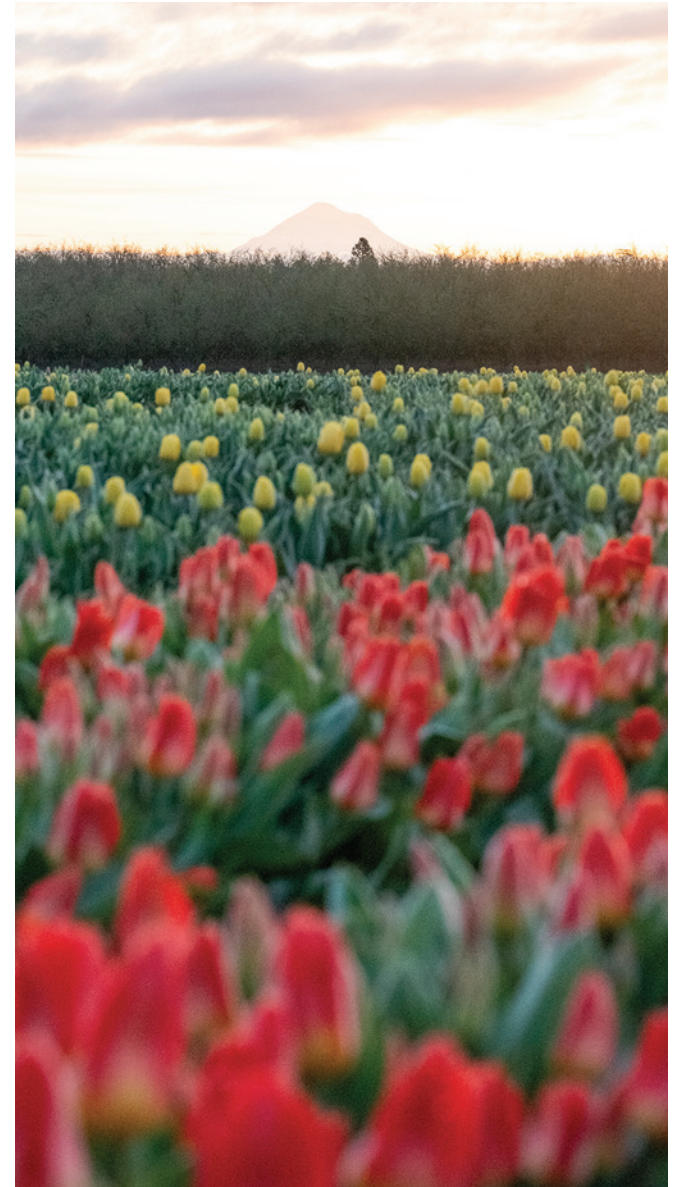
## Our independence

The County Internal Auditor reports functionally to the Internal Audit Oversight Committee and administratively to the elected County Treasurer. This authority ensures the Office is free of undue influence.

## Our team

Jodi Cochran, CPA, CIA, CGMA, CRMA, County Internal Auditor

Kathy Yeung, CPA, CIA, Senior Internal Auditor



<sup>10</sup> <https://na.theiia.org/standards-guidance/mandatory-guidance/pages/standards.aspx>

# Contact Us

## **Office of County Internal Audit**

2051 Kaen Road #460

Oregon City, OR 97045

Phone: 503-742-5983

Email: [ocia@clackamas.us](mailto:ocia@clackamas.us)