

**TO:** Kosciusko County Clerk's Office and County Election Board

**CC:** Election Board Member, Bill Morton  
Election Board Member, Austin Rovenstine  
Election Board Secretary & County Clerk, Ann Torpy  
Chief Deputy Clerk, Melissa Boggs

**DATE:** 7/17/2024

**SUBJECT:** Summary of 2024 Kosciusko County Primary Post-Election Audit

On June 5, 2024, the VSTOP team successfully completed a post-election audit in Kosciusko County, Indiana, for the 2024 Primary Election. The following memo will summarize the pre-audit process, explain the execution of the audit, and present the audit results.

## **Pre-Audit Process**

VSTOP has been authorized by the Indiana Secretary of State to conduct post-election audits. At this time, Indiana does not have mandated post-election audits, and participation is voluntary by the county, and designated by the Secretary of State. Kosciusko County formally requested designation on April 25, 2024 via a County Election Board Resolution. Kosciusko County was granted designation and audit prep began.

An initial audit meeting was held to review the post-election audit process, and answer any questions Kosciusko County Election Officials had about the process. From there, the audit date, time, location and selection of audited contests were coordinated by the County Clerk and VSTOP and were finalized.

Using the Stark Audit Tool, VSTOP proceeded to run ballot sample size estimates on the selected contests based on the initial election night reports found on the county website. While these may not have been the final vote totals (pre-certification), they work appropriately for estimating expected sample sizes and approximating how long it would take to complete the audit.

Kosciusko County was advised by VSTOP to select only Republican contests for audit due to the overwhelming margin of Republican to Democratic ballots cast, and the inability to separate primary ballots by party when using direct-record electronic (DRE) voting systems. For example, auditing a Democratic race may require a sample of 25 ballots. Since the ballots cannot be separated, and Republican votes held nearly 90% of the vote share, it can be expected the random sample would pull many more Republican ballots. It could take exorbitant sample sizes to reach the 25 Democratic ballots that were needed for sample because of the significant disparities in party vote share. While no Democratic contests were selected for audit, the integrity of ballots cast and machine accuracy can be confirmed because the Republican ballots being sampled are from machines used by both parties on Election Day.

In consultation with VSTOP and Kosciusko County Election Officials, it was determined the post-election audit will be inspecting Election Day ballots, so audit estimations and ballot manifests/inventories were generated using only Election Day ballots and reported Election Day totals. It was also determined this audit would be completed with a 1 percent risk limit and 99 percent confidence level. This means there is 99 percent confidence the audit would catch an outcome error if there was one, and only 1 percent risk the audit would not catch any outcome errors. The only way a 100 percent confidence level can be achieved is through a contest's full recount, and an audit is not a recount. The 1 percent risk limit represents the lowest possible risk, and the 99 percent level represents the highest confidence level, that can be achieved in Indiana's post-election audit process.

The ballot manifest/inventory was generated by Kosciusko County's Voting System Vendor, MicroVote, and included all votes cast on Election Day that were recorded via Cast Vote Record (CVR) with Voter-Verified Paper Audit Trails (VVPAT). One voting system used on Election Day had a VVPAT error where votes cast were digitally recorded but did not print on the VVPAT. The issue was reported and addressed by the system's vendor, MicroVote. Based on a review of the issue, VSTOP has full confidence that all votes cast were counted and this system anomaly did not impact vote totals, election outcomes, or the integrity of the post-election audit. The full statement from MicroVote, confirmed by Kosciusko County, is below for the record.

“As we were removing VVPAT rolls in preparation for the audit one roll had not (no) votes and no election header on it. Both test print buttons on the unit itself worked correctly. We then tested the VVPAT with combinations of the same voting machine and red communication cable that was in the booth with it and a different voting machine and communication cable and all combinations of components worked correctly in each test.

There was an entry in the audit logs on the Election Day voting machine that was in the booth with the VVPAT that confirmed the voting machine was programmed for use with VVPAT. At least one entry showed that a VVPAT paper ballot was voided. This is also a possible indication the voter saw a paper ballot. One explanation is the VVPAT unit, or the paper roll, was changed after the last ballot cast on the machine but Ann and her team were confident that this didn't happen.

Therefore, we have no explanation for the cause of the issue. If this were an equipment malfunction, we have not seen this type of malfunction before where a voting machine programmed for use with VVPAT was not printing to a VVPAT yet there were no error messages and voters were allowed to cast ballots. Also, this seems unlikely as the poll workers would have ignored the message on the screen that asks them to verify a VVPAT election header printed when starting the election. Poll workers would have also had to not realize ballot headers weren't printing for each voter. Finally, all of the voters would have had to ignore the instructions on the screen to verify their paper ballot before casting their vote.”

- Mike Miller – President, MicroVote

With that being said, the total VVPAT count for Election Day ballots that were eligible for audit was 9,066. VSTOP then checked the manifest for functionality in the Stark Audit Tool and confirmed it functioned properly. All pre-audit prep was complete and the audit was ready to be conducted.

The information above is detailed below:

- **Audit Date:** June 5, 2024
- **Audit Time:** VSTOP Set-up and Pre-Audit Meeting 10:00 AM - Audit Begins 11:00 AM
- **Location:** Kosciusko County Justice Building - 121 N. Lake St. Warsaw, IN 46580
- **Total Ballots Selected for Audit:** Election Day Ballots on VVPAT – 9,066
- **Estimated Ballot Sample Sizes for Contests Selected for Audit:**
  - Kosciusko County Coroner (REP)
    - Diluted Margin – 26.52%
    - Estimated Sample Size – 39 Ballots
  - Kosciusko County Commissioner Northern District (REP)
    - Diluted Margin – 8.49%
    - Estimated Sample Size – 120 Ballots
  - Kosciusko County Surveyor (REP)
    - Diluted Margin – 29.15%
    - Estimated Sample Size – 35 Ballots

## Execution of Post-Election Audit

The VSTOP Audit Team, led by VSTOP’s Election System Audit Specialist, Matt Housley, arrived in Kosciusko County at approximately 10:00 AM and began audit set-up. As the VSTOP Team set-up, Matt had a pre-audit meeting for all County Election Officials participating in the audit. The meeting covered the post-election audit process and responsibilities, reviewed and confirmed contest selection and election result totals, and completed a final review of the public post-election audit presentation that will be given just prior to the conducting of the audit. By approximately 10:55 AM the pre-audit meeting was concluded and the audit set-up was complete. Kosciusko County’s public, post-election audit officially began at 11:00 AM.

The VSTOP team members who participated in this audit included:

- Dr. Jay Bagga and Dr. Chad Kinsella, VSTOP Co-Directors
- Matt Housley, Election Systems Audit Specialist
- Marc Chatot, Program Manager
- Austin Bilbrey, Logistics Specialist
- Duncan Klemm, IT Specialist

The Kosciusko County Election Officials who participated in this audit included:

- Ann Torpy, County Clerk
- Melissa Boggs, Chief Deputy Clerk
- Kelly Moorman, Deputy Clerk
- Ashlee Faulkner, Deputy Clerk
- Bill Morton, Election Board Member
- Austin Rovenstine, Election Board Member

The Kosciusko County Voting System Vendor, members of MicroVote, who participated in this audit included:

- Steve Shamo, General Manager
- Dan Haas, Employee

VSTOP conducted a Ballot Comparison Audit using the Stark Audit Tool built for this type of post-election audit. This audit type is meant to inspect ballots for a match between the CVR and VVPAT. Every ballot's CVRs should match its VVPAT counterpart, resulting in a 100% match rate. Kosciusko County Election Officials alongside the VSTOP Team manually inspect the ballot's CVR to the VVPAT for the selected contests and track the match rate through the required number of ballots to sample. After the required number of ballots (or more) have been sampled, the VSTOP Team enters the match information into the Stark Audit Tool and as long as there are zero non-matches, the audit will be successfully completed.

The audit began with an introductory presentation given by Matt Housley, Dr. Chad Kinsella and Dr. Jay Bagga to all persons in attendance. This presentation provided general information about the post-election audit process and methodology used, specific information relating to Kosciusko County's audit, and allowed for a Q&A to address any questions or concerns. This presentation has been attached as *Appendix A* to this memo. After this presentation concluded, execution of the audit began. A 20-digit seed number was generated to assist the Stark Audit Tool in selecting the random sample of ballots. This number was generated live-time through 20 rolls of a 10 sided-die by audit participants and members of the public. The live-time generation of the seed number assures the sample is truly random and no-one could know what ballots were going to be selected for sample prior to the audit beginning. The seed number also becomes a control for this audit, so should the audit ever need to be replicated, it can be done so in its entirety.

The seed number for the Kosciusko County Post-Election Audit is as follows:

**48101816751361556156**

The seed number was entered into the Stark Audit Tool and a random sample of ballots was generated. VSTOP drew an initial sample size of 150 ballots. All three contests were reviewed using ballots from this initial sample. For Ballot Comparison Audits, undervotes may or may not be used for inspection. Either way, the integrity and result of the audit will not be affected. VSTOP allows county officials to make the decision on whether they would like to inspect undervoted ballots. Kosciusko County Election Officials determined they would use undervotes in the ballot inspection process. This means if the contest had been under voted by the voter, then

the ballot sampled will be inspected for an undervoted CVR to VVPAT match. While it is highly unlikely all 150 ballots would be inspected, 150 ballots were drawn to account for the expected need to sample more than the required amount due to the following factor:

- Ballots are not separated by party. Since Republican contests are selected for audit, if the sample draws a Democratic ballot, it will not be inspected for audit and will be skipped. Even though Democratic ballots were not inspected for audit, a CVR to VVPAT match inspection can still be completed. For every skipped ballot, a new ballot must be sampled that can be inspected for audit.

## Random sampling

Pseudo-Random Sample of Ballot Cards

Seed:	48101816751361556156		
Number of ballot cards:	9066		
Current sample number:	150		
Draw this many ballot cards:	150	<input type="button" value="draw sample"/>	<input type="button" value="reset"/>

*Above: Stark Audit Tool Screenshot of Seed Number and Initial Ballot Sample*

The contest requiring the largest sample size for audit was Republican Kosciusko County Commissioner Northern District at 120 ballots. Republican Kosciusko County Surveyor required 35 ballots and Republican Kosciusko County Coroner required 39 ballots. All three contests were inspected on each ballot sampled for audit if needed and applicable. Inspected by at least one County Election Official and one member of the VSTOP Audit Team, each ballot was reviewed for the CVR to VVPAT match for the selected contests. Inspection continued until at least the minimum number of ballots required for inspection were met to achieve the set 1 percent risk limit and 99 percent confidence level. The inspection of the sample of ballots generated the following results.

### Initial sample size

Initial sample size

Contest information

Ballot cards cast in all contests: 9066 Smallest margin (votes): 770. Diluted margin: 8.49%.

Contest 1. Contest name: Kosciusko County Commissioner Northern District

Contest type:  plurality  super-majority

Winners: 1

Reported votes:

Candidate 1 Name: Marcia A. Baumgartner	Votes: 1396
Candidate 2 Name: Sue Ann Mitchell	Votes: 3572
Candidate 3 Name: Nathan Scherer	Votes: 2802

Add candidate to contest 1 Remove last candidate from contest 1

Add contest Remove last contest

Audit parameters

Risk limit: 1%

Expected rates of differences (as decimal numbers):

Overstatements. 1-vote: 0.001 2-vote: 0.0001

Understatements. 1-vote: 0.001 2-vote: 0.0001

Starting size

Round up 1-vote differences.  Round up 2-vote differences. Calculate size 120.

Above: Stark Audit Tool Screenshot of County Commissioner Northern District Sample Size

### Initial sample size

Initial sample size

Contest information

Ballot cards cast in all contests: 9066 Smallest margin (votes): 2,643. Diluted margin: 29.15%.

Contest 1. Contest name: Kosciusko County Surveyor

Contest type:  plurality  super-majority

Winners: 1

Reported votes:

Candidate 1 Name: James R. Moyer	Votes: 5045
Candidate 2 Name: Ryan Prince	Votes: 2402

Add candidate to contest 1 Remove last candidate from contest 1

Add contest Remove last contest

Audit parameters

Risk limit: 1%

Expected rates of differences (as decimal numbers):

Overstatements. 1-vote: 0.001 2-vote: 0.0001

Understatements. 1-vote: 0.001 2-vote: 0.0001

Starting size

Round up 1-vote differences.  Round up 2-vote differences. Calculate size 35.

Above: Stark Audit Tool Screenshot of County Surveyor Sample Size

### Initial sample size

Initial sample size

Contest information

Ballot cards cast in all contests: 9066 Smallest margin (votes): 2,404. Diluted margin: 26.52%.

Contest 1. Contest name: Kosciusko County Coroner

Contest type:  plurality  super-majority

Winners: 1

Reported votes:

Candidate 1 Name: Tracy Cutler-Wilson	Votes: 2767
Candidate 2 Name: Tyler Huffer	Votes: 5171

Add candidate to contest 1 Remove last candidate from contest 1

Add contest Remove last contest

Audit parameters

Risk limit: 1%

Expected rates of differences (as decimal numbers):

Overstatements. 1-vote: 0.001 2-vote: 0.0001

Understatements. 1-vote: 0.001 2-vote: 0.0001

Starting size

Round up 1-vote differences.  Round up 2-vote differences. Calculate size 39.

Above: Stark Audit Tool Screenshot of County Coroner Sample Size

## Audit Results

- Republican Kosciusko County Commissioner Northern District
- Republican Kosciusko County Surveyor
- Republican Kosciusko County Coroner
  - A total of 126 ballots were sampled for all contests. Of the 126 ballots, 120 were able to be inspected for audit and 6 ballots were skipped because they were Democratic ballots. While one contest needed only 35 ballots, and another needed 39, all three contests were audited inspecting 120 ballots. All 120 inspected ballots had a CVR and VVPAT match, resulting in **100 percent match rate**. The estimated sample to achieve the set risk limit and confidence level was 120 inspected ballots, but was achieved after 113 inspected ballots. The audit concludes with **99 percent confidence** that the election systems functioned properly resulting in correctly tabulated and reported election outcomes.

Stopping sample size and escalation

---

Ballots audited so far: 126

---

1-vote overstatements:	<input type="text" value="0"/>	Rate: 0
2-vote overstatements:	<input type="text" value="0"/>	Rate: 0
1-vote understatements:	<input type="text" value="0"/>	Rate: 0
2-vote understatements:	<input type="text" value="0"/>	Rate: 0

---

Estimated stopping size

**Audit complete**

If no more differences are observed: 113.  
 If differences continue at the same rates: 113.  
 Estimated additional ballots if difference rates stay the same: 0.

*Above: Stark Audit Tool showing Risk Limit and Confidence Level were met after 113 inspected ballots*

## In Closing

VSTOP would like to thank the Kosciusko County Clerk's Office, Ann Torpy and Melissa Boggs for their coordination, the Kosciusko County Election Board for their voluntary request for audit designation, and The Indiana Secretary of State's Office for approving Kosciusko County's audit designation and their support of VSTOP to conduct these initiatives.

Upon completion of all 2024 Primary Post-Election Audits, a full summary report of all post-election audit activities and their respective results will be prepared and submitted to the Indiana Secretary of State and all counties involved in a 2024 Primary Post-Election Audit.

For any questions or concerns regarding Indiana's Post-Election Audit Procedures, or information contained in this memo, contact Matt Housley, Election Systems Audit Specialist, at [vstop@bsu.edu](mailto:vstop@bsu.edu).

**Matt Housley, MPA**



*Election Systems Audit Specialist*  
**Voting System Technical Oversight Program**

**Dr. Jay Bagga**



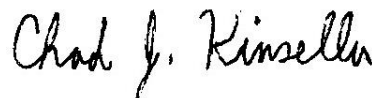
*Co-Director*  
**Voting System Technical Oversight Program**

**Dustin Renner**



*Election Director*  
**Indiana Secretary of State**

**Dr. Chad Kinsella**



*Co-Director*  
**Voting System Technical Oversight Program**