TO: Lake County Board of Elections and Registration

CC: Board of Elections Chairman, Kevin Smith
Board of Elections Member, John Reed
Board of Elections Member, Michael Mellon
Board of Elections Member, Mara Candelaria Reardon
County Clerk, Mike Brown
Director, Michelle Fajman
Assistant Director, Jessica Messler

DATE: 6/24/2025

SUBJECT: Summary of 2025 Lake County Special Post-Election Audit

On May 28, 2025, the VSTOP team successfully completed a post-election audit in Lake County, Indiana, for the 2025 Special 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. Lake County formally requested designation on April 15, 2025 via a County Election Board Resolution. Lake 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 Lake County Election Officials had about the process. From there, the audit date, time, location and selection of audited contests, coordinated by the Director, Michelle Fajman, Assistant Director, Jessica Messler, and VSTOP, were finalized. The audit was scheduled for and conducted on May 28, 2025 at the Lake County Government Center in Crown Point, Indiana.

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.

County Election Officials were advised that due to the 2025 Special Election voting systems including vote records for both referendums on multiple machines, these public questions would be audited together using a combined randomized sample of both referendums. In consultation with VSTOP, Election Officials determined the post-election audit would utilize all absentee in-person early voting and election day ballots. These ballots were selected because they were cast on the voting system in which the audit is built to inspect. The final audit estimations and ballot manifests/inventories were generated using those ballot types and the county's certified reported results.

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 a major voting system

malfunction if there was one, and only 1 percent risk the audit would not catch any major system malfunctions. The only way a 100 percent confidence level can be achieved is through a contest's full inspection of every ballot, which is a recount, not an audit.

The ballot manifest/inventory was generated by Lake County's Voting System Vendor, MicroVote, and included all votes cast during absentee in-person voting and on Election Day that were recorded via Cast Vote Record (CVR) with Voter-Verified Paper Audit Trails (VVPAT). 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:** May 28, 2025
- **Audit Time:** VSTOP Set-up/Pre-Audit Meeting 10:30 AM – Audit Begins 11:00 AM
- **Location:** Lake County Government Center - 2293 N. Main Street Crown Point, IN 46307
- **Total Ballots Selected for Audit:**
  Absentee In-Person Early Voting & Election Day Ballots on VVPAT – 4,676
- **Estimated Ballot Sample Sizes for Public Questions Selected for Audit:**

  - Crown Point School Corp Referendum
  - Hobart School Corp Referendum
    - Smallest Diluted Margin – 19.44%
      Estimated Sample Size – 53 Ballots

Execution of Post-Election Audit

The VSTOP Audit Team, led by VSTOP's Election System Audit Specialist, Matt Housley, arrived at the County Government Center at approximately 10:30 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 11:00 AM the pre-audit meeting was concluded and the audit set-up was complete. Lake County's public, post-election audit officially began just after 11:05 AM.

The VSTOP team members who participated in this audit included:
- Dr. Jay Bagga, VSTOP Senior Director
- Matt Housley, Election Systems Audit Specialist
- Marc Chatot, VSTOP Manager
- Alisa Gray, Election Training and Assessment Specialist

The Lake County Election Officials who participated in this audit included:
- Michelle Fajman, Director LCBER
- Jessica Messler, Assistant Directory LCBER
- Gina Alavanja, Election and Registration Clerk

- Joel Rodriguez, Registration Administrator
- Jerry Schmitt, Election Administrator
- Juanita Trivunovic, Election Clerk

Lake County Voting System Vendor, MicroVote, had Steve Shamo, General Manager, participating and providing support during the audit as well.
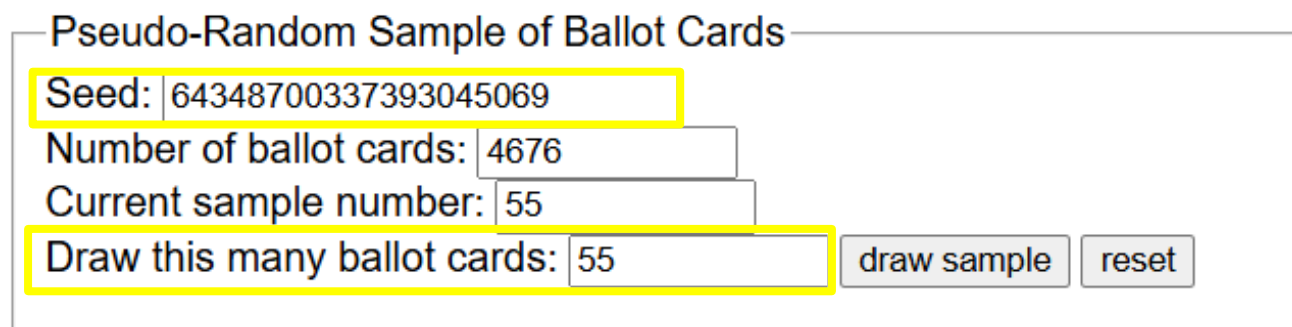
VSTOP conducted a Ballot Comparison Audit using the Stark Audit Tool built for this type of post-election audit. This audit type is meant to inspect ballots for a match between the CVR and VVPAT. Every ballot's CVR should match its VVPAT counterpart, resulting in a 100% match rate. Lake County Election Officials alongside the VSTOP Team manually inspect the ballot's CVR to the VVPAT for the selected public questions and track the match rate through the required number of ballots to sample. After the required number of ballots 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 a public post-election audit presentation given by VSTOP Senior Director, Dr. Jay Bagga and Election Systems Audit Specialist, Matt Housley. The presentation overviewed VSTOP and explained the post-election audit process. A ballot-comparison audit method was used. In a Ballot-Comparison Audit, the digital CVR (Cast Vote Record) is reviewed and matched with the VVPAT (Voter-Verifiable/Verified Paper Audit Trail) to ensure all sampled ballots CVR and VVPAT records match 100%. The audit needed to inspect at least 53 ballots total between the two contests to achieve a 99% confidence level in the voting systems' functionality. The sample was drawn in live-time using a random seed number generated by 20 rolls of a 10-sided die. 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 Lake County Post-Election Audit is as follows:
64348700337393045069

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 55 ballots. Both referendum questions were reviewed using ballots from this initial sample. The images below feature the Stark Audit Tool visualizing the information described above.

Above: Stark Audit Tool Screen Shot of Seed Number and Initial Ballot Sample

Above: Stark Audit Tool Screenshot of U.S. House Contest Margin, Risk Limit, & Sample Size

Inspected by County Election Officials and members of the VSTOP Audit Team, each ballot was reviewed for the CVR to VVPAT match for ballots cast in the Special Election. This sample achieved the set 1 percent risk limit and 99 percent confidence level. The inspection of the sample of ballots generated the following results.

Audit Results

- Crown Point School Corp Referendum
- Hobart School Corp Referendum
  - The randomized sample of both referendum questions totaling 55 ballots were inspected for a CVR to VVPAT match. All inspected ballots resulted in 100% CVR/VVPAT match rate. **The 100% match rate gives a 99 percent confidence level that the election equipment used in Lake County functioned properly, resulting in correctly reported election outcomes for the 2025 Special Election.**

Above: Stark Audit Tool showing 1% Risk Limit and 99 % Confidence Level were met after 50 inspected ballots

In Closing

VSTOP would like to thank Director, Michelle Fajman, and Assistant Director, Jessica Messler, for their coordination, the Lake County Board of Elections and Registration for their voluntary request for audit designation, and The Indiana Secretary of State's Office for approving Lake County's audit designation and their support of VSTOP to conduct these initiatives.

Upon completion of all 2025 Special Post-Election Audits, a full summary report of all Special Election 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 2025 Special Post-Election Audit.
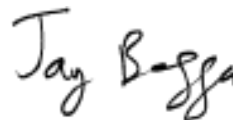
For any questions or concerns regarding Indiana's Post-Election Audit Procedures, or information contained in this memo, contact Matt Housley, Election Systems Audit Specialist, at vstop@bsu.edu.

Matt Housley, MPA

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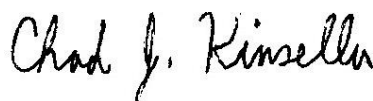**Voting System Technical Oversight Program**

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