



February 21, 2023

Laura Cosgray  
White County Circuit Court Clerk  
110 North Main St, #5  
Monticello, IN 47960

Dear Clerk Cosgray,

On February 13, 2023, the VSTOP team successfully completed a post-election audit in White County, Indiana, for the 2022 General Election. The VSTOP Team members who participated in person included Dr. Chad Kinsella, Co-Director; Liz Beatrice, Program Manager; Marc Chatot, Certification Specialist; and Alisa Gray, Graduate Assistant. This activity was carried out by the VSTOP Team in collaboration with the White County Audit Team. The White County Team members included Laura Cosgray, White County Circuit Court Clerk; Shanda Cortez, White County Voter Clerk; John Mitchell, White County Election Board Member; John Wilson, White County Poll Worker; Eva Cartmell, White County Poll Worker; Judy Serlegelmiech, White County Poll Worker and Precinct Committee Member; Mark Bentley, White County Proxy; Amy McCarty, White County Volunteer; JoLynn Behny, Pulaski County Clerk; and Bernadette Manuel, Starke County Clerk. MicroVote vendor representatives Steve Shamo, General Manager; and Dan Haas, Regional Service Coordinator, were present and assisted throughout the audit.

The VSTOP Team would like to thank Clerk Cosgray, the White County Audit Team, and the White County Election Board for hosting this post-election audit. Several preparatory meetings were conducted with the county in the weeks leading up to the post-election audit and Clerk Cosgray provided valuable information and data that was used to conduct the audit.

The post-election audit began with an introductory presentation to the county participants on the morning of the audit. This presentation included the generation of a 20-digit seed number, in collaboration with all county participants. The seed number produced is as follows: 36351193844523932739.

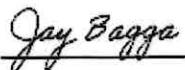
The VSTOP team would also like to take this opportunity to provide a brief description of the post-election audit conducted and the contests that were audited. White County uses the MicroVote EMS 4.4 direct record electronic voting system. The post-election audit included the total number of Absentee Mail-In ballots cast on paper and all Absentee Walk-In and Election Day ballots cast on voter-verifiable paper audit trails (VVPATs) during the White County 2022 General Election.

In consultation with White County, the following three races were audited with an initial risk limit set at 9% (as the attached report shows, the actual risk limits attained were lower):

- Secretary of State
- Treasurer of State
- United States Representative District 4

There was a total of 6,827 Absentee and Election Day ballots cast. 404 ballots were sampled to reach the risk limit and verify the outcomes. Of this total, the audit team was required to sample 248 ballots for Secretary of State, 67 ballots for Auditor or State, and 89 ballots for United States Representative District 4 to meet the risk limit. Specifics regarding each race's outcomes are displayed by images provided by Dr. Philip Stark's Audit Tool used to conduct the post-election audit and can be found in Appendix A.

VSTOP acknowledges the Indiana Secretary of State and his office staff for their full support. At the end of all post-election audits for the 2022 General Election, a full report of the audit results will be prepared and submitted to the Indiana Secretary of State and each participating county.

  
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Dr. Jay Bagga, VSTOP Co-Director

  
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Dr. Chad Kinsella, VSTOP Co-Director

## White County Post-Election Audit Procedure

**Election:** 2022 General Election

**Date(s) of Audit:** February 13, 2023

**Number of Registered Voters:** 17,426

**Total Number of Ballots Cast:** 6,827

**Total Absentee Mail-In Ballots Cast:** 390

**Total Ballots Cast on VVPAT (Absentee Walk-In & Election Day):** 1,204

**Stark's Risk-Limit:** Initially set at 9%  
(See below for the actual risk limit achieved)

**Seed Number:** 36351193844523932739

**Post-Election Audit Method(s):**

- Ballot Polling Post-Election Audit (Absentee Mail-In Ballots)
- Ballot Comparison Post-Election Audit (Absentee Walk-In & Election Day Ballots)

**Post-Election Audit Tools used:**

The post-election audit tools have been designed by Dr. Philip Stark.

The ballot polling tool is available at:  
<https://www.stat.berkeley.edu/~stark/Vote/ballotPollTools.htm>

The ballot comparison tool is available at:  
<https://www.stat.berkeley.edu/~stark/Vote/auditTools.htm>

## Audited Races Details

### Races Audited – Ballot Polling Method:

White County Ballot Polling Audit (ABS Mail-In)						
Race/Question	Outcome		Smallest Margin	Diluted Margin	Initial Sample Size	Total Ballots Sampled
Secretary of State	(R) Diego Morales*	213	57	14.62%	219	236 <sup>1</sup>
	(D) Destiny Wells	156				
	(L) Jeffrey Maurer	13				
	Undervotes	8				
	<b>Total Ballots Cast</b>					
Treasurer of State	(R) Daniel Elliot*	246	110	28.21%	62	56 <sup>2</sup>
	(D) Jessica McClellan	136				
	Undervotes	8				
	<b>Total Ballots Cast</b>					
United States Representative District 4	(R) Jim Baird*	236	90	23.08%	92	79 <sup>3</sup>
	(D) Roger D. Day	146				
	Undervotes	8				
	<b>Total Ballots Cast</b>					

Asterisk (\*) denotes the winner of each contest

<sup>1</sup>The initial sample included 219 ballots, which did not meet the risk limit. An additional 17 ballots were sampled. With the new sample size of 236 ballots, the risk limit was met.

<sup>2</sup>The initial sample included 62 ballots. Once duplicates were removed, the sample size was 56, which met the risk limit and did not require further ballots to be sampled (see note below).

Note: In the context of the audit procedure, the term “duplicate ballot” refers to instances where the audit tool algorithm selects a particular ballot for review in more than one instance. Since useful information is not gained by reviewing the same ballot twice or successive times, the “remove duplicates” feature within the auditing tool is used.

<sup>3</sup>The initial sample included 92 ballots. Once duplicates were removed, the sample size was 79, which met the risk limit and did not require further ballots to be sampled (see note below).

Note: The Stark Audit Tool’s algorithm provided a randomized list of ballots to review in the total sequence of ballots. Due to the randomization, the audit tool may require that the audit team review the same ballot twice. The risk of auditing the same ballot twice is eliminated by utilizing the “remove duplicates” feature within the auditing tool. This ensures that the 6-cut method can be conducted accurately and ensures each ballot audited represents a unique data point.

**Races Audited – Ballot Comparison Method:**

White County Ballot Comparison Audit (ABS Walk-In & Election Day)						
Race/Question	Outcome		Smallest Margin	Diluted Margin	Initial Sample Size	Total Ballots Sampled
Secretary of State	(R) Diego Morales*	855	578	48.01%	12	12
	(D) Destiny Wells	277				
	(L) Jeffrey Maurer	50				
	Undervotes	22				
	<b>Total Ballots Cast</b>	1204				
Treasurer of State	(R) Daniel Elliot*	926	665	55.23%	11	11
	(D) Jessica McClellan	261				
	Undervotes	17				
	<b>Total Ballots Cast</b>	1204				
United States Representative District 4	(R) Jim Baird*	935	685	56.89%	10	10
	(D) Roger D. Day	250				
	Undervotes	19				
	<b>Total Ballots Cast</b>	1204				
Asterisk (*) denotes the winner of each contest						

## Secretary of State (Absentee Mail-In)

### Initial Sample Size:

With the selected risk limit of 9%, the initial sample size for this contest was 219 ballots.

Initial sample size

Contest information

Ballots cast in all contests: 390      Smallest margin (votes): 57. Diluted margin: 14.62%.

Contest 1. Contest name: Secretary of State

Winners: 1

Reported votes:

Candidate 1 Name:	Diego Morales	Votes:	213
Candidate 2 Name:	Destiny Wells	Votes:	156
Candidate 3 Name:	Jeffrey Maurer	Votes:	13

Add candidate to contest 1    Remove last candidate from contest 1

Add contest    Remove last contest

Audit parameters

Risk limit: 9%      Expected sample size: 219.

### Final Outcome:

The risk limit was not met with the initial sample size of 219 ballots. An additional 17 ballots were sampled. With the final sample size of 236 ballots, the final outcome resulted in an 8% risk limit, which indicates 92% confidence that the audit confirmed the results of this contest.

### Audit progress

<b>Audited votes for Secretary of State: 236</b>		
	Diego Morales	133
Destiny Wells	99	0.08
Jeffrey Maurer	4	0

## Secretary of State (Absentee Walk-In & Election Day)

### Sample Size:

With the selected risk limit of 9%, the sample size for this contest was 12 ballots.

Initial sample size

Contest information

Ballot cards cast in all contests: 1204    Smallest margin (votes): 578. Diluted margin: 48.01%.

Contest 1. Contest name: Secretary of State  
Contest type:  plurality  super-majority

Winners: 1

Reported votes:

Candidate 1 Name: Diego Morales	Votes: 855
Candidate 2 Name: Destiny Wells	Votes: 277
Candidate 3 Name: Jeffrey Maurer	Votes: 50

Add candidate to contest 1    Remove last candidate from contest 1

Add contest    Remove last contest

Audit parameters

Risk limit: 9%

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: 12.

### Final Outcome:

With a sample size of 12 ballots, the final outcome resulted in a 0% risk limit, which indicates 100% confidence that the audit confirmed the results of this contest. Further sampled ballots were not required for this audit.

Stopping sample size and escalation

Ballots audited so far: 12

1-vote overstatements:	0	Rate: 0
2-vote overstatements:	0	Rate: 0
1-vote understatements:	0	Rate: 0
2-vote understatements:	0	Rate: 0

Estimated stopping size

Calculate    **Audit complete**

If no more differences are observed: 11.  
If differences continue at the same rates: 11.  
Estimated additional ballots if difference rates stay the same: 0.

## Treasurer of State (Absentee Mail-In)

### Sample Size:

With the selected risk limit of 9%, the sample size for this contest was 62 ballots. Once duplicates were removed, the sample size was 56 ballots.

Initial sample size

Contest information

Ballots cast in all contests: 390      Smallest margin (votes): 110. Diluted margin: 28.21%.

Contest 1. Contest name: Treasurer of State

Winners: 1

Reported votes:

Candidate 1 Name: Daniel Elliot	Votes: 246
Candidate 2 Name: Jessica McClellan	Votes: 136

Add candidate to contest 1    Remove last candidate from contest 1

Add contest    Remove last contest

Audit parameters

Risk limit: 9%      Expected sample size: 62.

### Final Outcome:

With a sample size of 56 ballots, the final outcome resulted in a 3% risk limit, which indicates 97% confidence that the audit confirmed the results of this contest. Further sampled ballots were not required for this audit.

### Audit progress

<b>Audited votes for Treasurer of State: 56</b>		
	Daniel Elliot	38
Jessica McClellan	18	0.03

## Treasurer of State (Absentee Walk-In & Election Day)

### Sample Size:

With the selected risk limit of 9%, the sample size for this contest was 11 ballots.

Initial sample size

Contest information

Ballot cards cast in all contests: 1204      Smallest margin (votes): 665      Diluted margin: 55.23%

Contest 1. Contest name: Treasurer of State

Contest type:  plurality  super-majority

Winners: 1

Reported votes:

Candidate 1 Name: Daniel Elliot	Votes: 926
Candidate 2 Name: Jessica McClellan	Votes: 261

Add candidate to contest 1 | Remove last candidate from contest 1

Add contest | Remove last contest

Audit parameters

Risk limit: 9%

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: 11.

### Final Outcome:

With the sample size of 11 ballots, the final outcome resulted in a 0% risk limit, which indicates 100% confidence that the audit confirmed the results of this contest. Further sampled ballots were not required for this audit.

Stopping sample size and escalation

Ballots audited so far: 11

1-vote overstatements: 0      Rate: 0

2-vote overstatements: 0      Rate: 0

1-vote understatements: 0      Rate: 0

2-vote understatements: 0      Rate: 0

Estimated stopping size

Calculate **Audit complete**

If no more differences are observed: 10.

If differences continue at the same rates: 10.

Estimated additional ballots if difference rates stay the same: 0.



## United States Representative District 4 (Absentee Mail-In)

### Sample Size:

With the selected risk limit of 9%, the initial sample size for this contest was 92. Once duplicates were removed, the sample size was 79 ballots.

Initial sample size

Contest information

Ballots cast in all contests: 390    Smallest margin (votes): 90. Diluted margin: 23.08%.

Contest 1. Contest name: United States Representative District 4

Winners: 1

Reported votes:

Candidate 1 Name:	Jim Baird	Votes:	236
Candidate 2 Name:	Roger D. Day	Votes:	146

Add candidate to contest 1    Remove last candidate from contest 1

Add contest    Remove last contest

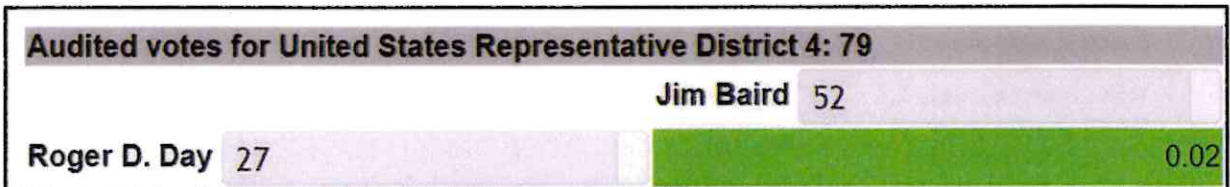
Audit parameters

Risk limit: 9%    Expected sample size: 92.

### Final Outcome:

With a sample size of 79 ballots, the final outcome resulted in a 2% risk limit, which indicates 98% confidence that the audit confirmed the results of this contest. Further sampled ballots were not required for this audit.

### Audit progress



## United States Representative District 4 (Absentee Walk-In & Election Day)

### Sample Size:

With the selected risk limit of 9%, the sample size for this contest was 10 ballots.

Initial sample size

Contest information

Ballot cards cast in all contests: 1204    Smallest margin (votes): 685    Diluted margin: 56.89%

Contest 1. Contest name: United States Representative District 4  
Contest type:  plurality  super-majority

Winners: 1

Reported votes:

Candidate 1 Name: Jim Baird	Votes: 935
Candidate 2 Name: Roger D. Day	Votes: 250

Add candidate to contest 1    Remove last candidate from contest 1

Add contest    Remove last contest

Audit parameters

Risk limit: 9%

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: 10

### Final Outcome:

With the sample size of 10 ballots, the final outcome resulted in a 0% risk limit, which indicates 100% confidence that the audit confirmed the results of this contest. Further sampled ballots were not required for this audit.

Stopping sample size and escalation

Ballots audited so far: 10

1-vote overstatements: 0	Rate: 0
2-vote overstatements: 0	Rate: 0
1-vote understatements: 0	Rate: 0
2-vote understatements: 0	Rate: 0

Estimated stopping size

Calculate    Audit complete

If no more differences are observed: 9.

If differences continue at the same rates: 9.

Estimated additional ballots if difference rates stay the same: 0.