

Maricopa County:

# Forensic Election Audit



# Introduction





# Introduction - MC Forensic Audit



## Overview



- 2.1M ballots processed by hand
- Over 1,500 people involved
- Over 100,000 hours of time contributed



# Introduction – MC Forensic Audit



## Security

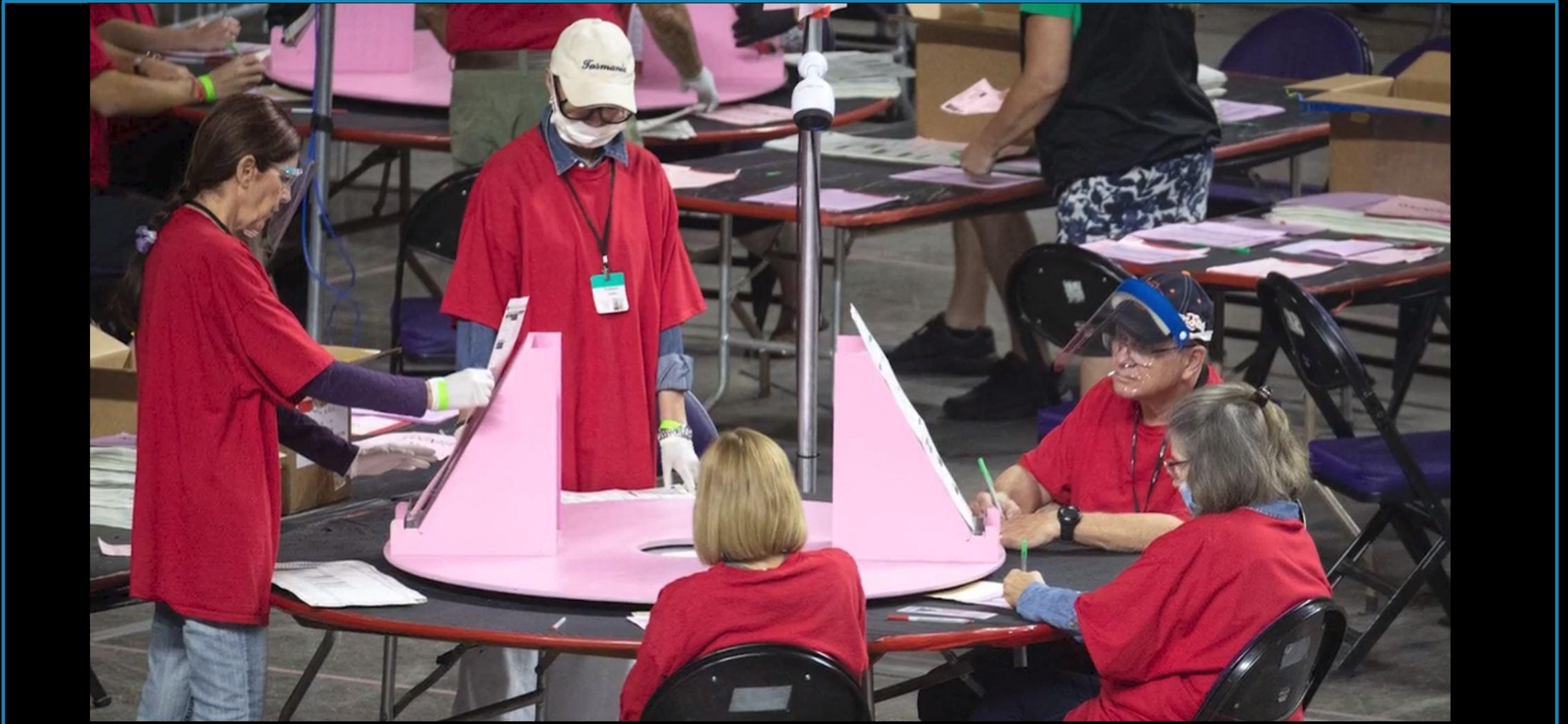


- The perimeter was secured at the coliseum
- COVID checks & access validation
- Ballots & election equipment were secure in corrals
- 24/7 video surveillance & law enforcement guard

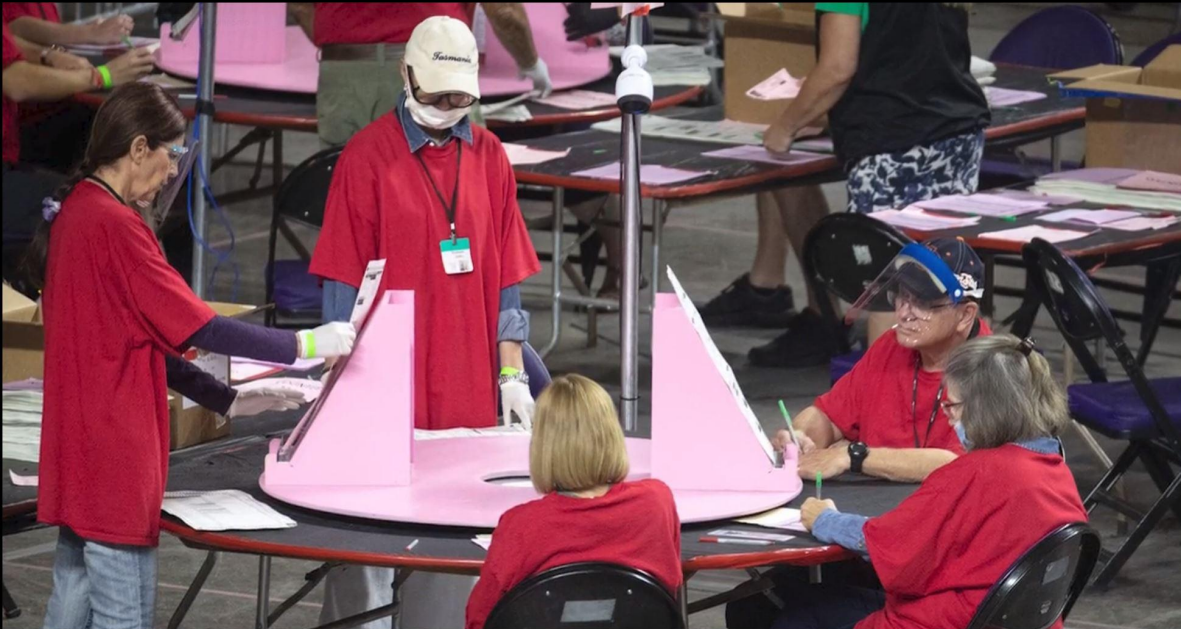


Cyber  
Ninjas

# Introduction – MC Forensic Audit



## Tallying



- All counters were Maricopa residents who voted in the last election.
- Each person was run through a standard background check.
- All three counters counted “blind” without any talking.
- Roughly every ~50 ballots tallies were compared and needed to agree or be redone.





Cyber  
Ninjas

# Introduction – MC Forensic Audit



## Paper Examination (PE)



- High quality DLSR images captured of the front and back of all ballots
- Microscope images captured of key ballot locations
- Over 140TB of data storage for PE alone

# Status





## Current Status

- Complete
  - Hand-counting of all federal races
  - Image and microscope capture of all ballots
  - Review & Comparison of Official Results
  - Analysis of the Voter Rolls
- Expected Soon
  - Review of Splunk Logs and Routers via Settlement Agreement terms.
  - Completion of Paper Analysis



# Status – MC Forensic Audit

## Current Status

- No Longer In Scope
  - Canvasses to confirm voter rolls
    - Removed from scope of work.
  - Review of tabulator configuration to check internet configuration.
    - Hardware tokens never provided by the County.
  - Review of Voter Roll System
    - Systems accessing rolls never provided by the County.
  - Review of ICX Devices
    - Systems never provided by the County.
  - Review of provisional ballots
    - Provisional Ballots Never Provided by County

# Ballots & Tallying



## Ballots & Tallying – Background

- Ballots that are damaged or can't be processed by a tabulator are duplicated.
- Damaged Sent to Duplicates (DSD) are the originals, DUPs the Duplicate.
- There should be one DSD per DUP.
- There should be a unique serial number to match up a DSD to its DUP.
- Duplicate ballots should be stored separately from original ballots.



# Ballots & Tallying – MC Forensic Audit

## Findings

- Duplicate ballots comingled with original ballots
- Duplicated ballots with incorrect & missing serial numbers
- Duplicates that reuse serial numbers
- More duplicates than original ballots

BOX ID	Description	TYPE	SERIAL NO	Count
DUPBOARD3HAND0216	Duplicate Ballots	99	Biden	27,869
DUPBOARD3HAND0217	144	99	Biden	Board 1 Hand Dup 217
DUPBOARD3HAND0218	492	0	Biden	Board 1 Hand Dup 218





# Ballots & Tallying – MC Forensic Audit

## Findings

- Duplicate ballots comingled with original ballots
- Duplicated ballots with incorrect & missing serial numbers
- Duplicates that reuse serial numbers
- More duplicates than original ballots
  - Extra DUPS favor Trump & Jorgenson
  - Extra DUPS favor McSally

Description	Damaged Sent to Duplication (DSD)	Duplicate Ballots (DUP)	Expected % To Candidate	% Difference To Candidate
Trump	995,404	996,896	48%	58%
Biden	1,040,873	1,041,733	50%	33%
Jorgenson	31,501	31,580	2%	3%

Description	Damaged Sent to Duplication (DSD)	Duplicate Ballots (DUP)	Expected % To Candidate	% Difference To Candidate
McSally	983,662	985,100	47%	55%
Kelly	1,064,336	1,065,266	51%	36%

## Tally Results – (Based on OSD)

	<b>McSally</b>	<b>Kelly</b>	<b>Write In / Over / Under</b>	<b>Total</b>
<b>Maricopa County Forensic Audit</b>	983,662	1,064,336	40,398	2,088,396*
<b>Official Maricopa County Canvass</b>	984,203	1,064,396	40,964	2,089,563
<b>DELTA</b>	(541)	(60)	(566)	(1,167)

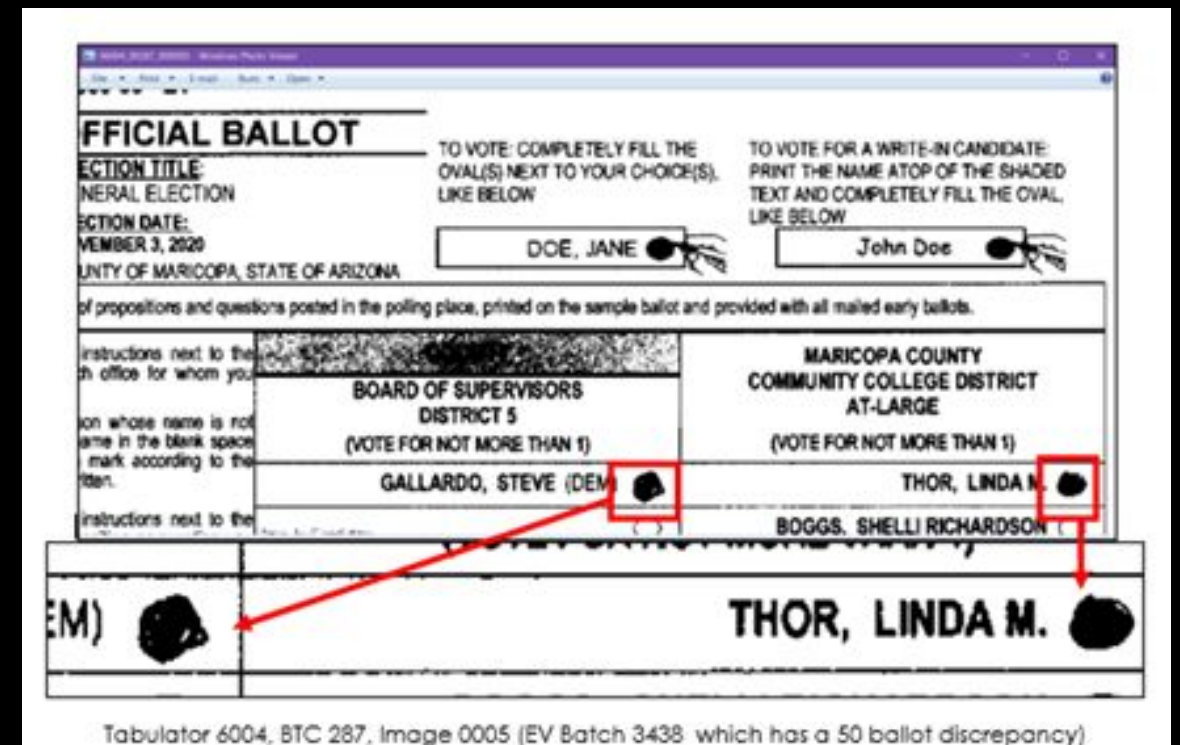
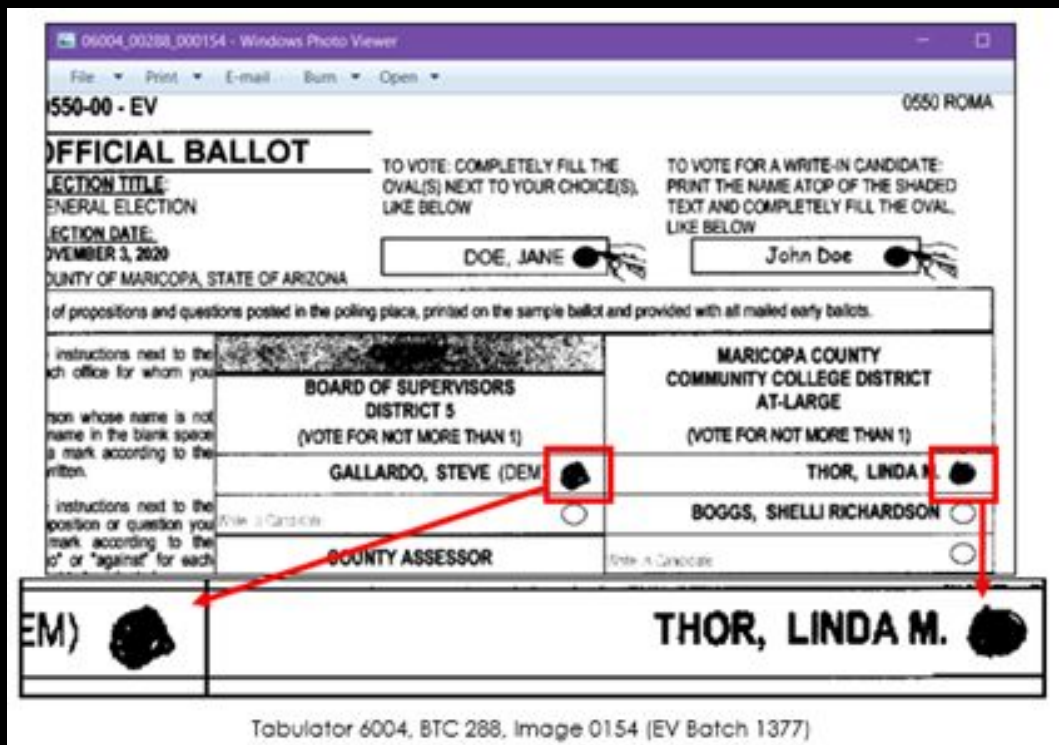
## Tally Results – (Based on OSD)

	<b>Trump</b>	<b>Biden</b>	<b>Jorgenson</b>	<b>Write In / Over / Under</b>	<b>Total</b>
<b>Maricopa County Forensic Audit</b>	995,404	1,040,873	31,501	20,791	2,088,569
<b>Official Maricopa County Canvass</b>	995,665	1,040,774	31,705	21,419	2,089,563
<b>DELTA</b>	(261)	99	(204)	(628)	(994)

\* Slight difference in Presidential & Senate ballot totals are due to small differences in hand counts across 2.1M ballots

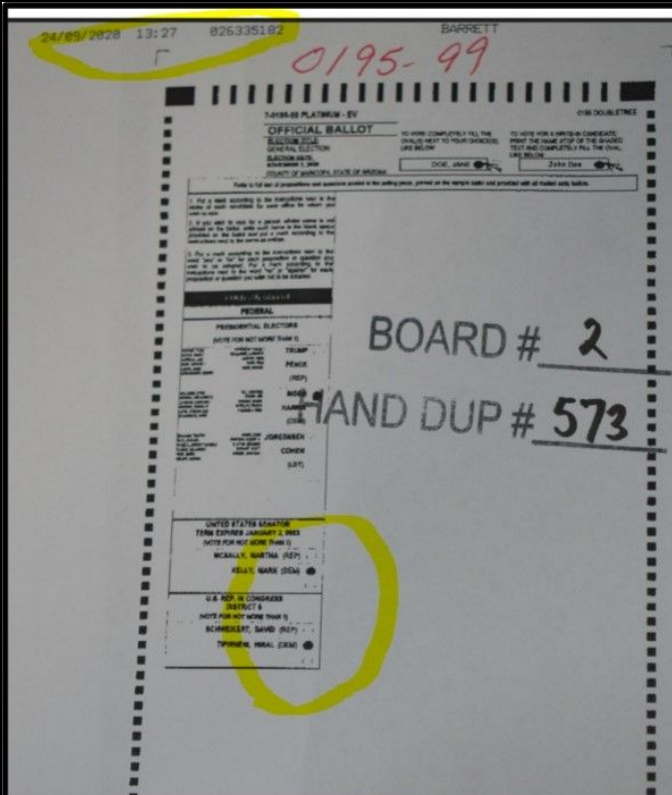
## Findings

- At least a batch of 50 ballots was run through the tabulators twice.



## Findings

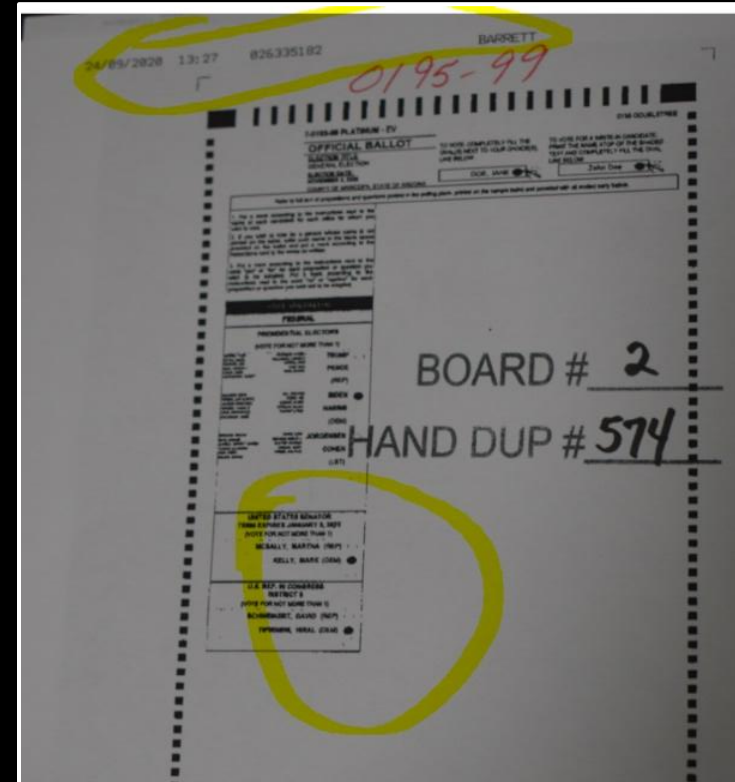
- Several UOCAVA ballots have been double-counted



24/05/2020 13:27 026335102 BARRETT  
0195-99

TAMM PLATINUM - EV  
OFFICIAL BALLOT

BOARD # 2  
HAND DUP # 573



24/05/2020 13:27 026335102 BARRETT  
0195-99

TAMM PLATINUM - EV  
OFFICIAL BALLOT

BOARD # 2  
HAND DUP # 574

# Official Results



## Official Results - Background

- Official Canvass – Tallies of the ballots cast
  - Per candidate, per precinct, provisional, etc.
- VM55 Final Voted File – A list of all the people who cast a ballot in the election
  - Indicates method of voting and other details
- VM34 Full Voter File – A list of all people eligible to vote
  - Released on a monthly basis

## Definitions

- EV32 Early Voting Sents – A list of all the ballots mailed out
  - Includes the date mailed, the address mailed to, the ballot type, etc.
- EV33 Early Voting Returns – A list of all the ballots received for Early Voting
  - Includes the date returned and the method (Mail-in or in Person)



## Election System Balance

- If the following situation happened
  - 10 people mailed in a ballot
  - 10 people voted early in person
  - 10 people voted on election day in person
- You would expect
  - The Official Canvas has a total of 30 votes across all the candidates / precincts etc.
  - The VM55 should show a list of 30 people:
    - 10 people who voted via mail-in
    - 10 via Early Voting in Person
    - 10 via Election Day in person
  - EV32 Sents would show 10 ballots mailed
  - EV33 Returns would show 10 mail-in ballots received, and 10 mail-in ballots for EV In Person

None of these system balance.



# Official Results – MC Forensic Audit

## Findings

- Official Canvass has 3,432 more ballots cast than the list of people who show as having cast a vote (VM55)
- 9,041 mail-in voters show returning more ballots (EV33) than they were sent (EV32).
- 277 Precincts show in the Official Canvass as having more ballots cast than people who showed up to vote (VM55) for a total of 1,551 excess votes.
- There are 2,472 ballots shown in EV33 that don't have corresponding entries in the VM55, and only 2,042 ballots show as rejected in the Official Canvas for a discrepancy of 430.
- 397 mail-in ballots show as received (EV33) that never show as sent (EV32).
- 255,326 Early Votes show in the VM55 that do not have a corresponding EV33 entry.

# Voters Who Moved





## Moving - Background

- Individuals who voted were compared against a commercial database called Melissa to see who moved before the October 5<sup>th</sup> cutoff.

### Melissa Personator

- Checks addresses associated with a user
- Shows prior and current addresses
- Tracks moves and move dates
- Tracks date-of-birth and death dates



# Moving – MC Forensic Audit

## Findings

- 23,344 voters voted via mail-in ballot even though they show in Melissa as having moved, and no one with the same last name shows as living at the address.
- 2,382 voters voted in-person even though they show in Melissa as having moved out of Maricopa County.
- 2,081 voters moved out-of-state during the 29 days before the election and were given a full ballot instead of a presidential-only ballot.

# Voter Rolls



## Voter Rolls - Background

- Registration dates do not generally change unless to correct a mistake.

Thank you for your questions.

**Are there any circumstances in which someone's registration date can change?**

Generally, a voter's date of registration does not change outside of correcting a mistake. The date of registration is the date where the voter first registered to vote in in the county, while any updates to a voter's registration is tracked separately.

The **only** time a voter may have two dates of registration is if their registration has previously been cancelled and the voter registers again. The original record could be cancelled for a variety of reasons, including death of the voter, voter request, or the voter has moved outside Maricopa County. Only the latest voter registration record is considered valid and a voter cannot use their cancelled record.

## Voter Rolls - Background

- AFFSEQ is a unique number found in the voter roll system that is associated with a single transaction to a single user.
  - That change transaction has an image to go along with it to reference the document that authorized the change.
  - AFFSEQ's should be unique and only happen once and definitely shouldn't be shared by users.
- A.R.S. 16-152 requires that complete names be used.

On Aug 30, 2021, at 11:52 AM, voterinfo - RISCX <voterinfo@risc.maricopa.gov> wrote:

Good morning [REDACTED]. The AFFSEQs refers to Affidavit sequence. Each transaction by a voter will result in an affidavit. The affidavit could be a modification to your registration such as address change, party change or an updated signature as an example. An affidavit identifier is also applied to the affidavit envelope, or a provisional ballot used during an election. These identifiers are unique to each transition and never repeated.





# Ballots & Tallying – MC Forensic Audit

## Findings

- Potentially as many as 5,047 individuals who voted in more than one county for up to 5,295 votes.
- 393 voters with incomplete names voted in the election.
- 198 individuals registered after the October 15<sup>th</sup> cutoff and voted in the election.
- 2,861 voters have shared an AFFSEQ number with another voter at some point.
- 282 potentially deceased voters voted in the election.
- 186 people potentially have duplicate voter IDs that both voted.

Description	Number of voters
Last name only	15
Last name is an initial only	9
No last name	45
First name is an initial only	324
Total	393