



Office of Kane County Clerk John A. Cunningham

Election Security and the Vote by Mail Process

Presentation for
Public Service Committee



Office of Kane County Clerk John A. Cunningham

Voting by Mail and **Election Security** are hot topics that have generated much attention recently. While these things might be common to the Kane County Clerk's Office, it is important that the voting public is knowledgeable of how these processes work and the measures taken by the Clerk's Office to protect our election process.



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The Clerk's Office has always taken and will continue to take **election security** and **ballot security very seriously**. Ensuring **safe, secure, and transparent elections** is critically important to the Clerk's Office and to the voters of Kane County.



The Clerk's Election Security Plan summarizes the procedures enacted by the Clerk's Office that have been taken and will be taken in the future to respond to changing conditions, new election laws, and public input.

Election Security continues to evolve and will adapt as necessary as changes are needed.



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Understanding Election Security requires some background in the Vote by Mail process.

The County Clerk's Office has made presentations to the Public Service Committee numerous times regarding the Vote by Mail process, Election Security, and related topics.



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One such presentation occurred in October 2020 when we detailed all of the steps of the Vote by Mail process

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The Vote by Mail Process in Kane County

October 2020

1



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This is not the first time Kane County voters have voted by mail. The Clerk's Office processed Vote by Mail ballots in the March primary election. It is the **same** method of voting that has been used for many years.

2



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For decades, the process of voting by mail was called "absentee voting" or voting by "absentee ballot." The Illinois Election Code codified the change of language from "absentee voting" to "Vote by mail."

3



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4



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The only difference is that the number of voters choosing to cast their ballots through the Vote by Mail process has increased in recent years.

5



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6



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Step 1: Voter completes an application for a VBM ballot

7



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Step 2: The voter's ballot is created

8



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Step 3: The voter's ballot is assembled

9





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Vote by Mail Processing Equipment

Public facilities

- Slated to expedite filling of ballots
- Because of language requirements, ballots are printed on 17x17 paper
- Folding machine allows for double fold to fit into Ball envelope
- We installed envelope to ballot slot to reduce postage costs, by all local Ballot processing 375,000 x 100,000 (800 ballots per slot)



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Vote by Mail Processing Equipment

Public facilities

- Automates process of inserting ballots, affixing instructions, and other materials into mailing envelope
- Accurately handles 1000s of ballots per minute, rather than manual one by one
- Quality control and bar coding reduces human error in processing ballots
- Officers for ballot envelope tracking to increase voter confidence in VBM process



11



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Step 4: The voter votes the VBM ballot

12



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Step 5: The voter returns the VBM ballot

13



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Step 6: The voter's ballot envelope is scanned, sorted, and sliced


14



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Vote by Mail Processing Equipment

Public facilities



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Step 7: The voter's signature is verified by a group of bipartisan election judges

16



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Step 8: The voter's ballot is extracted from the envelope

17



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Step 9: The voter's ballot is scanned and processed in the ballot scanner

18



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Step 10: The voter's ballot is counted

19





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It is necessary to understand that voting by mail is not a new thing. The Clerk's Office has processed Vote by Mail ballots from Kane County voters for decades. It is the same method of voting that has been used for many years.

In the past, voting by mail was called "absentee voting" or voting by "absentee ballot." In 2015, the Illinois Election Code codified the change of language from "**absentee voting**" to "**Vote by mail.**"



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The only change of significance is that the **number of voters choosing to cast their ballots** through the Vote by Mail process has increased in recent years.



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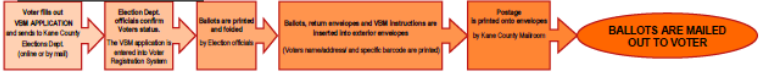
Vote by Mail Totals										
YEAR	CONSOLIDATED PRIMARY		CONSOLIDATED ELECTION		NON-PARTISAN ELECTION		GENERAL PRIMARY		GENERAL ELECTION	
	Applied	Voted	Applied	Voted	Applied	Voted	Applied	Voted	Applied	Voted
1968*							335	269	2,793	2,462
1970							177	167	753	679
1972*							392	341	3,042	2,618
1974							468	447	548	490
1976*							647	605	3,057	2,845
1978							259	249	1,092	1,024
1980*							897	855	3,531	3,373
1981	47	43	416	381						
1982							436	399	1,038	974
1983	61	57	313	265						
1984*							881	798	4,383	4,001
1985	306	278	760	724	203	187				
1986							628	581	1,290	1,188
1987			352	322	366	321				
1988*							1,403	1,314	4,514	4,043
1989	156	147	783	762	294	278				
1990							672	644	1,925	1,789
1991	36	36	353	335						
1992*							1,751	1,562	5,784	5,333
1993	151	145	991	938	320	275				
1994							1,216	1,102	2,934	2,491
1995	174	146	849	739	577	479				
1996*							1,184	1,038	5,273	4,535
1997	400	345	822	709	507	418				
1998							1,236	1,119	3,282	2,844
1999			1,383	1,268						
2000*							1,790	1,605	7,870	6,960
2001			1,292	1,181						
2002							1,972	1,765	3,803	3,237
2003	301	259	6,091	5,672						
2004*							1,958	1,667	9,635	8,613
2005	636	304	1,744	1,511						
2006							2,171	1,372	2,985	2,292
2007	145	73	626	461						
2008*							2,308	1,739	5,961	5,130
2009	153	87	856	528						
2010							1,599	866	5,761	4,783
2011			674	440						
2012*							1,583	1,025	6,698	6,013
2013	39	33	358	52						
2014							869	746	8,208	7,091
2015	2	2	547	416						
2016*							1,953	1,789	10,608	9,424
2017	13	13	760	532						
2018							1,501	1,352	16,364	14,501
2019			1,507	1,123						
2020*							6,069	4,931	91,409	85,034
2021	2,168	1,848	5,796	4,564						



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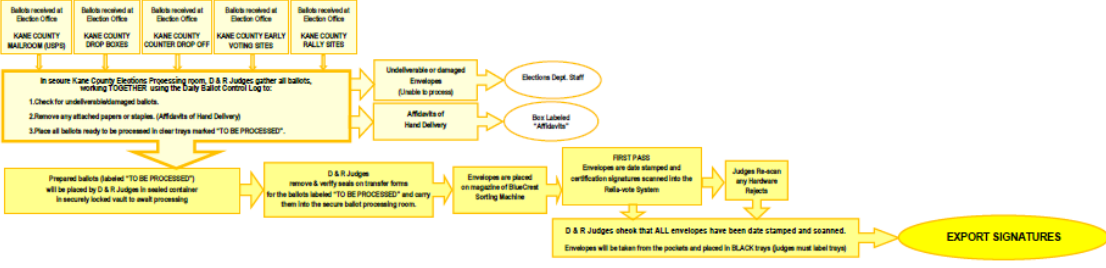
VOTE BY MAIL (VBM) PROCESSING IN KANE COUNTY

1. BALLOT CREATION PROCESS:



* All Judges must SIGN IN and take the Election Judges' Oath everyday using the Daily Ballot Control Log and the forms in the blue binders. Ballots shall be kept LOCKED in room secured with video surveillance during processing.

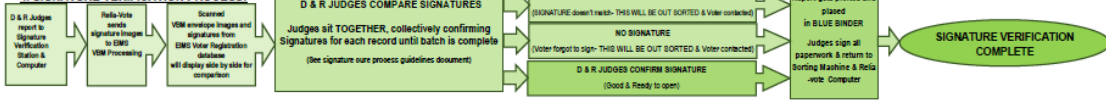
3. INITIAL SORTING PROCESS:



2. VOTERS RECEIVE, VOTE & RETURN THE BALLOTS:



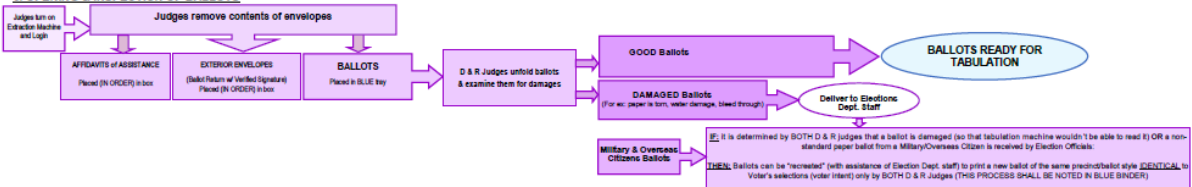
4. SIGNATURE VERIFICATION PROCESS:



5. SORTING BY PRECINCT PROCESS:



6. OPENING & INSPECTION OF BALLOTS



7. TABULATION OF BALLOTS PROCESS:

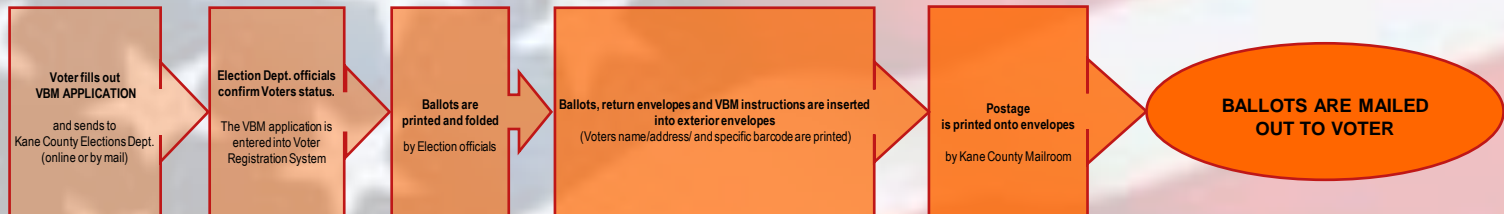


8. STORAGE OF BALLOTS PROCESS:





Step 1: Ballot Creation Process





Ballot Creation Process

1. Voter fills out VBM application (online or paper).
2. Election Dept. officials confirm that applicant is a registered voter using the Voter Registration System. The VBM application then is entered into Voter Registration System.
3. Ballot is printed and folded.



Ballot Creation Process

This is the folding machine. It is used as part of **Step 1 “Ballot Creation Process” (Orange)**.

- Used to automate folding of ballots
- Because of language requirements, ballots are printed on 11x17 paper
- Folding machine allows for double fold to fit into 6x9 envelope
- Reducing envelope to letter size reduce postage cost **by at least half** (saved approximately \$200k in 2020 general election)





Ballot Creation Process



This is the printer that prints VBM ballots. It is used as part of **Step 1 “Ballot Creation Process” (Orange)**. By keeping the printing process in house, we can maintain security over the ballots.



Ballot Creation Process

4. Ballot, return envelope and VBM instructions is inserted into exterior envelopes. Voter's name, address and USPS barcode are printed on envelopes. Intelligent Mail Barcode (IMB) printed for security and tracking. IMB is added security measure so that Clerk's Office can track envelope at every step of mailing process.
5. Postage is printed onto envelope.
6. Ballot is mailed to voter.
7. Voter can receive information that ballot was mailed through Clerk's Ballot Tracking Program.



Ballot Creation Process



This is the inserting machine used as part of **Step 1 “Ballot Creation Process” (Orange)**. The inserter automated the assembly of the ballots for mailing.



Ballot Creation Process

The inserter:

- Automates process of inserting ballots, affidavits, instructions, and return envelopes into mailing envelope
- Assembles hundreds of ballots per minutes, rather than several an hour
- Quality control and bar coding reduces human error in assembling ballots
- Allows for ballot envelope tracking to increase voter confidence in VBM process
- Ballots mailed via USPS beginning May 19 (May 13 for voters in the armed forces)
- Saved more than \$500k in staff costs for ballot assembly during November 2020 general election



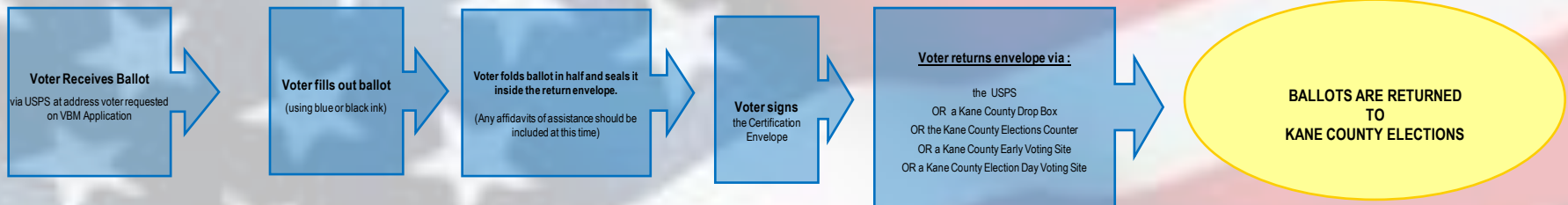
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Ballot Creation Process





Step 2: Receiving, Voting and Return Process



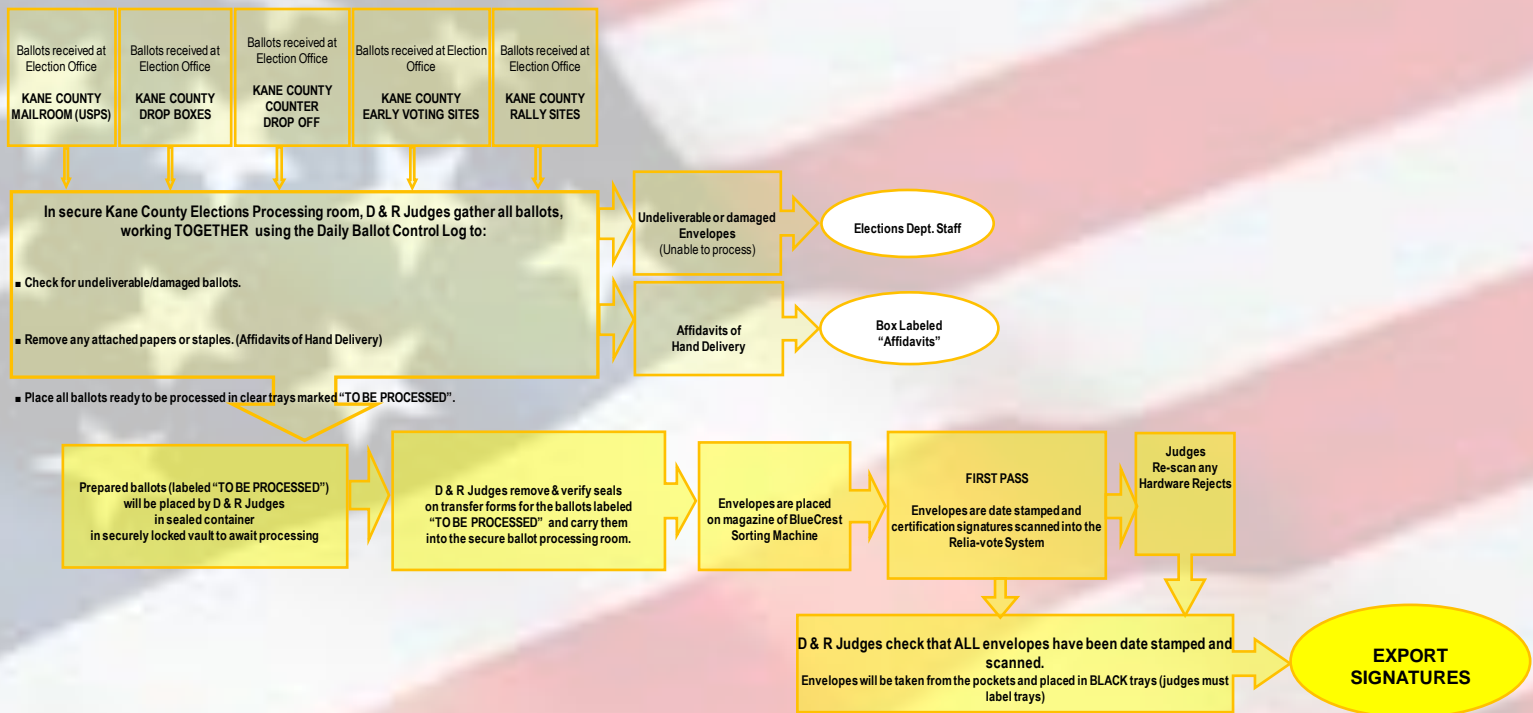


Receiving, Voting and Return Process

1. Voter Receives Ballot via USPS at address voter requested on VBM Application and confirmed in Voter Registration System
 2. Voter fills out ballot
 3. Voter folds ballot in half and seals it inside the return envelope
 4. Voter signs the Certification Envelope
5. Voter returns ballot envelope via USPS, drop box, or in person at Clerk's Office or voting location
 6. Ballots are returned to the Elections Department for processing
7. Voter can receive notification of when ballot is received by Clerk's Office through Ballot Tracking Program



Step 3: Initial Sorting Process





Initial Sorting Process

1. Ballots received at Election Office
2. In secure Kane County Elections processing room, Democratic & Republican Election Judges gather all ballots, working together using the **Daily Ballot Control Log** to:
 - a. Check for undeliverable/damaged ballots AND
 - b. Remove any attached papers or staples and place all ballots ready to be processed in clear trays marked “to be processed”
3. Prepared ballots (labeled “to be processed”) will be placed by D & R Judges in a sealed container in securely locked vault to await processing
4. Judges remove and verify seals on transfer forms for the ballots labeled **“To Be Processed,”** and then carry them into the secure ballot processing room.



Initial Sorting Process

5. Envelopes are placed on magazine of BlueCrest Sorting Machine
6. **FIRST PASS**: Envelopes are date stamped and certification signatures scanned (2 results):
 - a. "NOT GOOD": Judges re-scan any hardware rejects
 - b. "GOOD": D & R Judges check that all envelopes have been date stamped and scanned; Envelopes will be taken from the pockets and placed in BLACK trays (judges must label trays); Signatures are exported



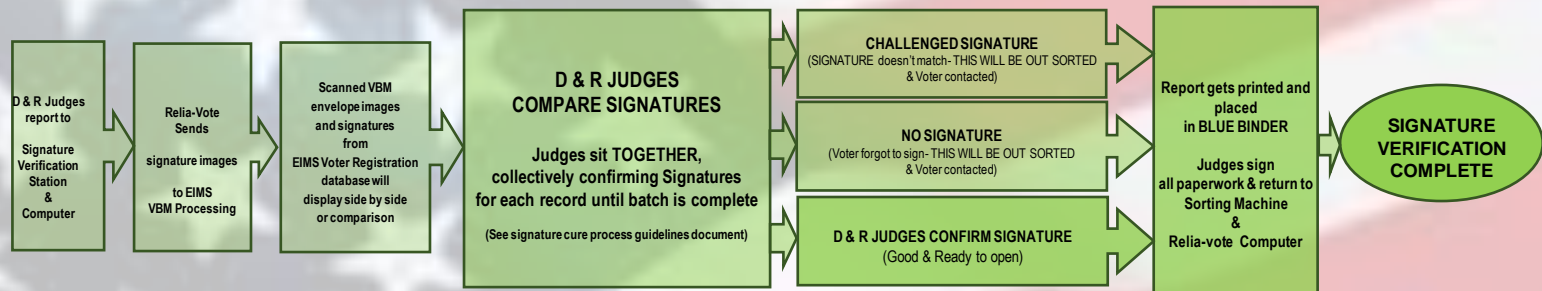
Initial Sorting Process



This is the sorting machine, which is used in **Step 3 “Initial Sorting Process”** (Yellow) and **Step 5 “Sorting by Precinct Process”** (Yellow)



Step 4: Signature Verification Process





Signature Verification Process

1. D & R Judges report to computer at Signature Verification Station
2. Relia-Vote computer sends signature images to EIMS Voter Registration database for VBM Processing
3. Scanned VBM envelope images and signatures from EIMS Voter Registration database will display side by side for comparison



Signature Verification Process

4. **D & R judges compare signatures--**

Judges sit together and collectively confirm signatures for each record until batch is complete, with 3 possible outcomes:

- a. CHALLENGED SIGNATURE (Sorted and separated)
(signature doesn't match- voter contacted)
- b. NO SIGNATURE (Sorted and separated)
(Voter forgot to sign- Voter contacted)
- c. D & R JUDGES CONFIRM SIGNATURE
(good & ready to open envelope)

5. Report gets printed and placed in blue binder; Judges sign all paperwork & return to Sorting Machine & Relia-vote Computer

(For 4a. and 4b., see signature cure process guidelines document)



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Signature Verification Process



SIGNATURE Validations

◦ MANUAL VERIFICATION OF SIGNATURES ON ELECTION
ENVELOPES

Signature Verification Judges have received training from a handwriting expert



Signature Verification Process

Agenda

- General Information about signatures
- Principles and Theories about Signature Analysis
- Various types of Forgeries
- Signature Variables
- Determining Authenticity:
 - Identifying Broad Characteristics
 - Identifying Local Characteristics
 - Use the worksheet to make your determination



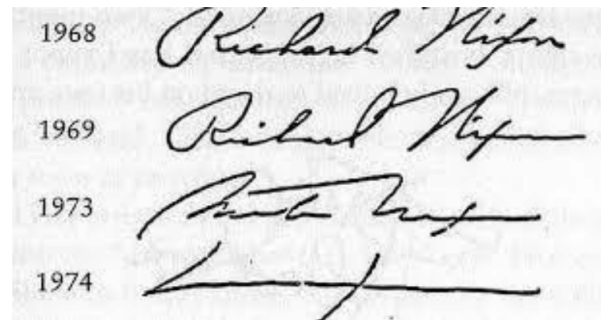
A few slides from the training course



Signature Verification Process

Principles and Theories

Signature Variables over Time



A few slides from the training course



Signature Verification Process

Determining
Slant

Broad Characteristics—Slant (Slope)

Barbara Bush

Jim Baker

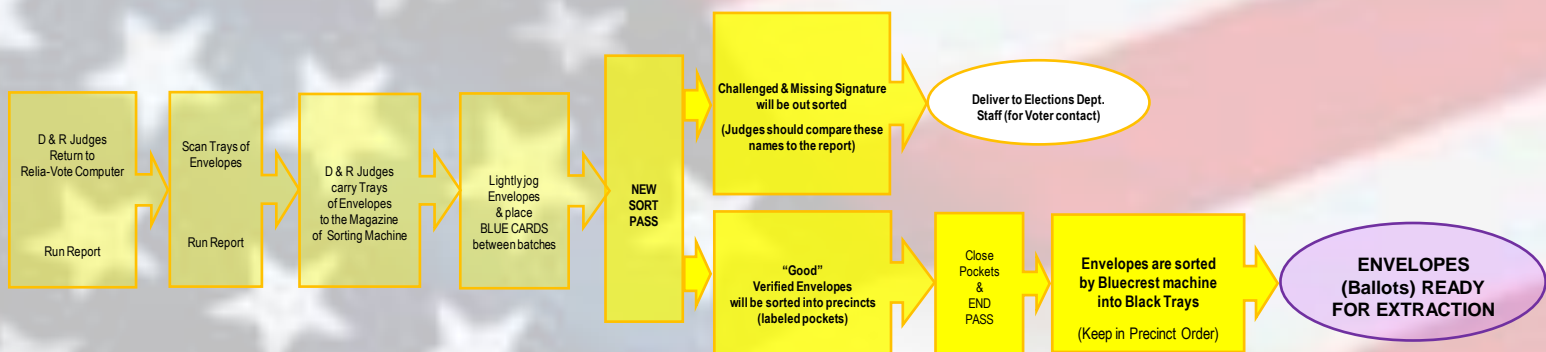
John Albert

Allen Ginsberg

A few slides from the training course



Step 5: Sorting by Precinct Process



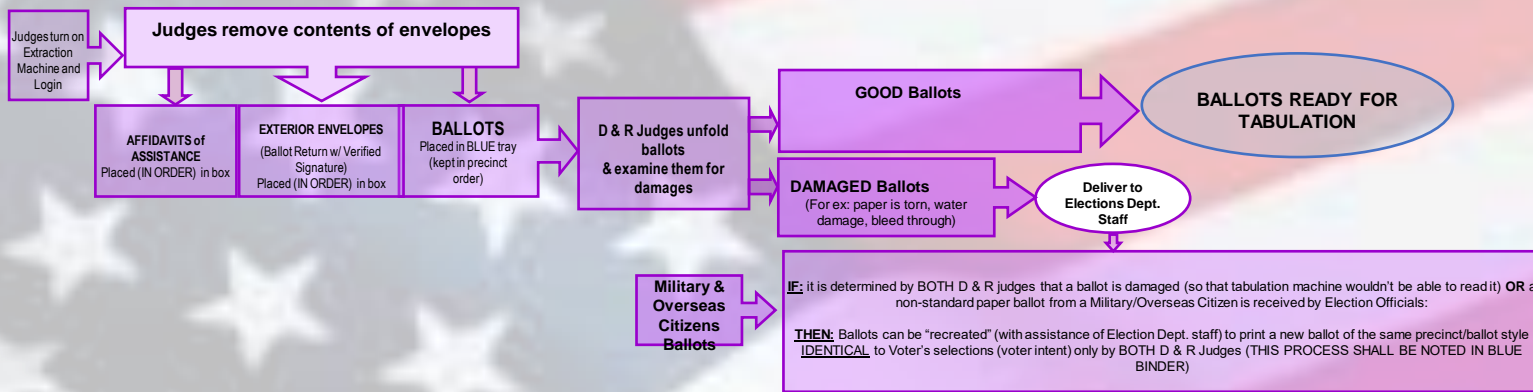


Sorting by Precinct Process

1. D & R Judges return to Relia-Vote Computer
2. Judges scan trays of envelopes
3. Judges carry trays of envelopes to the magazine of sorting machine
4. Lightly jog envelopes & place blue cards between batches
5. **NEW SORT PASS** (2 results):
 - a. “Not Good”: Challenged & Missing Signatures will be out sorted and then delivered to Elections Dept. Staff (for voter contact)
 - b. “Good”: Verified Envelopes will be sorted into precincts (labeled pockets); Envelopes are sorted by Sorter into black trays in precinct order and then ballots are ready to be extracted from envelopes



Step 6: Opening and Inspection of Ballots Process





Opening and Inspection of Ballots Process

1. Judges turn on Extraction Machine and Login

2. Judges remove contents of envelopes

a. Affidavits of Assistance placed (in order) in box

b. Exterior Envelopes (**ballot return envelope w/ verified signature**) placed
(in order) in box

c. Ballots placed in blue tray in precinct order



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Opening and Inspection of Ballots Process



This is the extracting machine, which is used in **Step 6 “Opening and Inspection of Ballots”** (Purple)



Opening and Inspection of Ballots Process

3. D & R Judges unfold ballots & examine them for damages (2 results):

a. “GOOD” ballots: Ballots ready for processing/tabulation

b. “Not Good”: Damaged Ballots (i.e. paper is torn, water damage, bleed through) delivered to Elections Dept. Staff

IF it is determined by BOTH D & R judges that a ballot is damaged (so that tabulation machine wouldn't be able to read it) OR a non-standard paper ballot from a Military/Overseas Citizen is received by Election Officials:

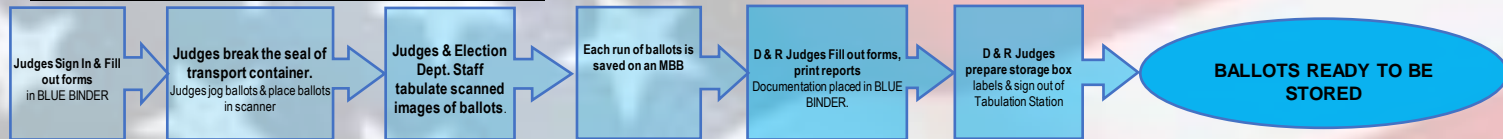
THEN: Ballots can be “recreated” (with assistance of Election Dept. staff) to print a new ballot of the same precinct/ballot style IDENTICAL to Voter's selections (voter intent) only by BOTH D & R Judges (This process shall be noted in the blue binder)

NOTE: Per federal and state election law, a Vote by Mail ballot can be transmitted electronically to registered voters serving in the armed forces or those temporarily outside of the U.S. As a result, the voted ballots once returned must be replicated on a scannable VBM that can be processed and tabulated. As with any other ballots, no ballots are handled without the presence of Democratic & Republican election judges.



Step 7: Tabulation of Ballots Process

7. TABULATION OF BALLOTS PROCESS:





Tabulation of Ballots Process

The processing and tabulation of ballots is done in a **secure room with limited access**. It is a separate process from the sorting, scanning and extracting process. The tabulation process is completed **without connection to the internet**. D & R Judges are present at all times that ballots are being processed and tabulated.

In the presence of Judges, the voted ballot is scanned (“processed”) into the ballot scanner and held until election night. The ballot is **not** counted or tallied at this time. No individual, whether election judge or Clerk’s staff, has a tally of the results from the processed VBM votes or knows how any voter has voted. The ballots are **tabulated** (officially “counted”) **after** the polls have closed on Election Day.



Tabulation of Ballots Process

On November 3, 2020, the Kane County Clerk's Office tabulated the more than 80,000 VBM ballots received and processed through Election Day.

At approximately 7:15 pm, the tabulation was completed and results for those 80,000+ voted VBM ballots as well as the more than 100,000 in person Early Votes that had been cast were posted on the Clerk's website.

While most surrounding counties were still processing and tabulating the VBM ballots *late into the night and in some cases for several days after*, **Kane County voters knew that their VBM votes had been cast and saw the results in real time as they were tabulated.**



Tabulation of Ballots Process

1. Judges sign in & fill out forms in blue binder
2. Judges break the seal of transport container and jog ballots & place ballots in scanner
3. Judges & Staff tabulate scanned images of ballots
4. Each run of ballots is saved on an MBB (portable storage drive with **no internet connectivity**)
5. D & R Judges fill out forms, print reports and place documentation in blue binder.
6. D & R Judges prepare storage box labels & sign out of Tabulation Station
7. Ballots ready to be stored



Step 8: Storage of Ballots Process

8. STORAGE OF BALLOTS PROCESS:





Storage of Ballots Process

1. D & R Judges place tabulated ballots in boxes and ballots are **sealed** with security labels
2. Judges affix **box labels & Chain of Custody summary form** specific to that Batch
(proves Date, Batch #, Judges Involved, # of Ballots inside box, and Chain of Custody)
3. Judges adhere side panel label onto box
(Easy to find Date, Batch #)
4. Boxes of tabulated ballots will be stored in a **secure vault**



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Another view of the entire process:

<https://www.nbcnews.com/meet-the-press/video/watch-mail-in-votes-move-through-california-s-largest-vote-processing-center-91094085706/>



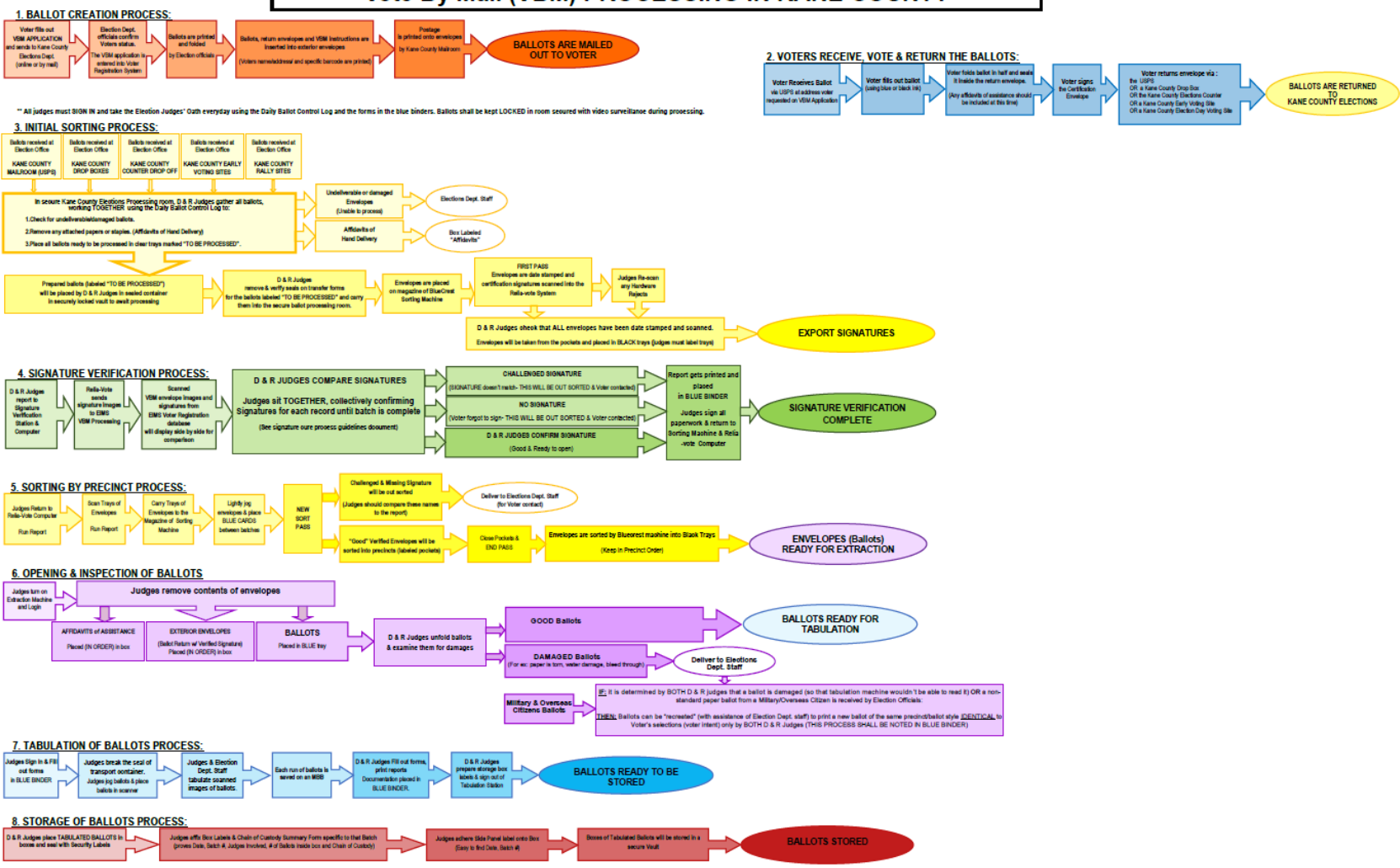
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The Clerk's Office continues to strive to meet the goal of being the **most transparent and secure election authority** in Illinois. Each step in the process will be labeled and color-coded so that observers know exactly what is occurring at each step in the process. We will have **cameras** focused on the areas where these steps are occurring.



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Vote By Mail (VBM) PROCESSING IN KANE COUNTY



The flow charts are organized to educate and inform the voting public.



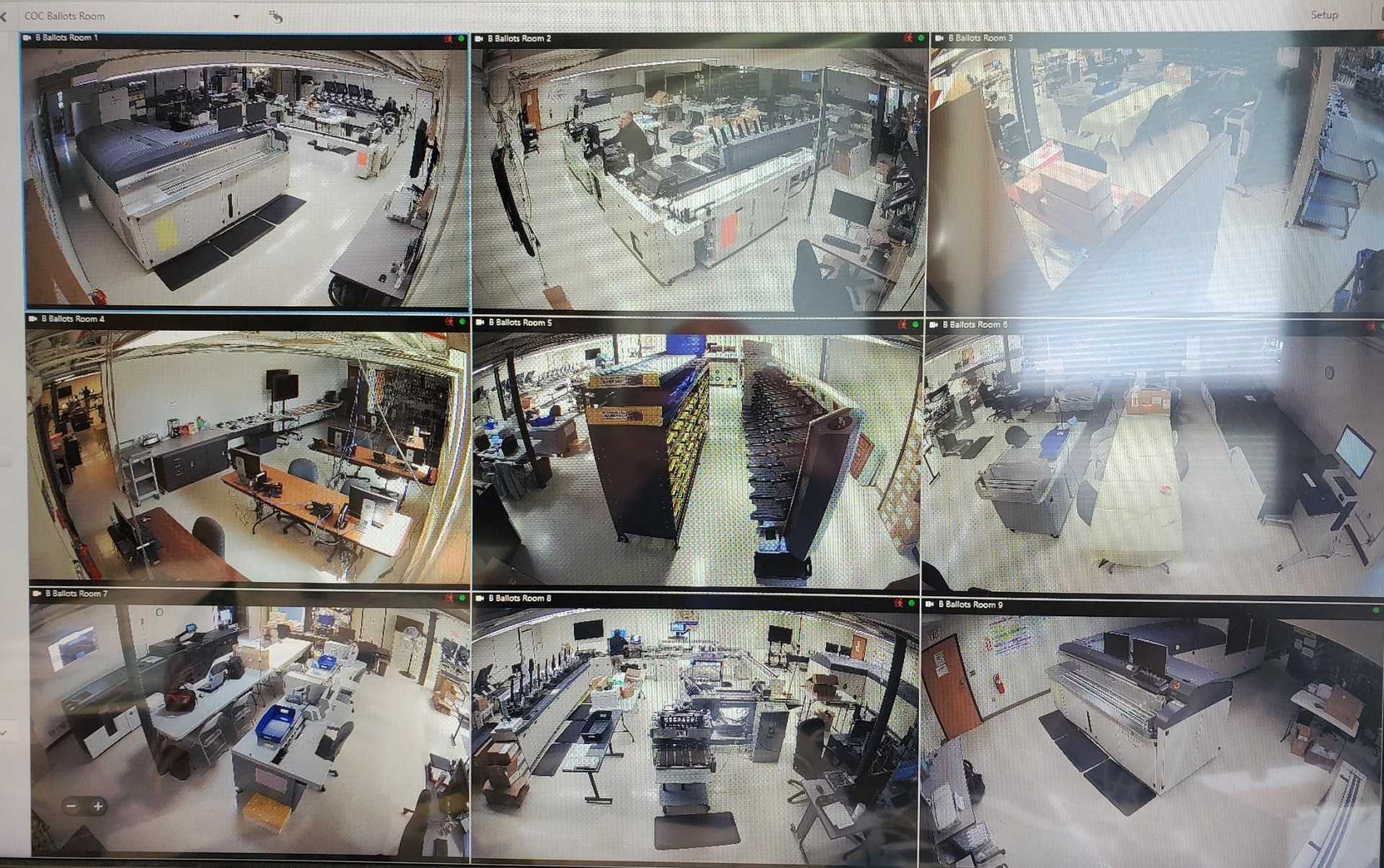
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Installation of additional cameras in ballot processing areas to increase **transparency and security**



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Bipartisan Chain of Custody

At least one Democratic and one Republican election judge must be present at any time Vote by Mail ballots are handled.





Bipartisan Chain of Custody

- ✓ Returned mail ballots can only be accepted into custody and handled by a bipartisan team of election judges. At other times, they must be kept in a container secured with a seal.
- ✓ Bipartisan teams trained in signature comparison validate mail ballots before they are accepted, just as bipartisan teams of election judges verify signatures of in-person voters.

**“A Tight Chain of Custody
Ensures Election Security”**



Locks and Seals

- ✓ When ballots are not under direct oversight of bipartisan teams, they are stored under lock and numbered seal, to ensure they can't be altered.
- ✓ Seals are numbered and recorded in logs to keep track of where they were used, when they were placed and removed, and who witnessed it.

**Plastic Wire Security Seal with
Numbered Serial**





Rigorous Documentation

- ✓ Election judges and staff working with ballots must follow written procedures.
- ✓ **Chain of Custody Logs** record all security seals, as well as the number of returned ballots received, accepted and scanned.
- ✓ Logs are signed by a bipartisan team of election judges.

	VBM Receiving							VBM Processing						VBM Storage		Additional Seals		
	Drop Box (+)	Mail room (+)	Kane Co Counter (+)	EV Centers (+)	Rally Sites (+)	Out of County (-)	Total Inbound Ballots	BlueCrest Batch ID #	BlueCrest Total	Sig Ver Challenge (-)	Extraction Issue (-)	Military / Overseas (+)	Cured Challenge (+)	Total Tabulation	Seal #1	Seal #2	Seal #1	Seal #2
							0							0				
							0							0				
							0							0				
Day's Total							0							0				
Seal # *														0				
Day 2							0							0				
Seal #														0				
Day 3							0							0				
Seal #														0				
Date: ___/___/___			Democratic Judge															
			Republican Judge															
Day 2*: ___/___/___			Democratic Judge															
			Republican Judge															
Day 3*: ___/___/___			Democratic Judge															
			Republican Judge															

Instructions:

- * If ballots are held overnight in receiving, circle and initial end of day totals, note seal number(s) and sign. Complete the 2nd day's totals below the first.
- * If processing is not completed on Day 1, circle and initial the total for the last phase completed. Indicate location and seal in main storage columns.
- On Day 2, continue to complete processing columns, and indicate final storage location and seal in the Additional Seals columns.
- * When processing is complete for all batches, add up column totals for processing and compare to Received Totals. Do they match? If not, explain below.



Openness to Observers

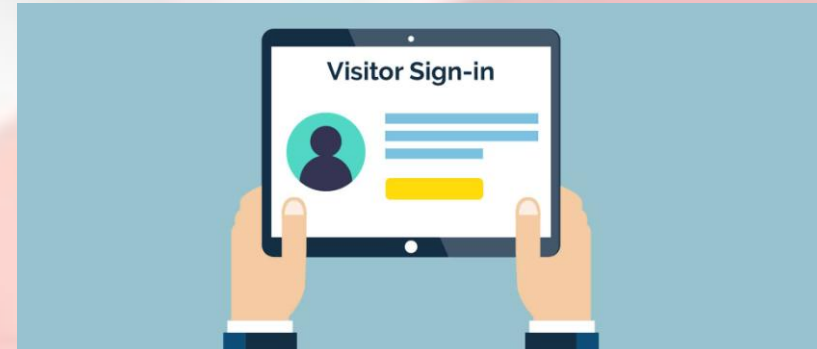
- ✓ Observers can watch all secure processes, from signature verification through opening envelopes, scanning ballots, processing/tabulating ballots, and sealing them securely in storage, either directly or on live closed-circuit video.





Openness to Observers

- ✓ To support *informed observation*, the Clerk provides guides and other explanatory material about the procedures, so observers understand what they're watching.
- Observers should take the time to understand how election procedures work.
- Questions are welcomed and should be directed to the staff member acting as observer liaison.





Levels of Security

- ✓ Voting equipment, ballots, and other election supplies deemed to be critical assets are kept in secure storage.
- ✓ Voted ballots and e-pollbooks (which hold personal identifying information) are secured using the strictest procedures, as described in detail below.
- ✓ A Kane County Sheriff's Deputy will be stationed in the Elections Office to assist with security.



Rigorous Compliance

- ✓ Compliance with written procedures is monitored on a daily basis.
- ✓ Completeness and accuracy of **Chain of Custody Logs** are audited on a daily basis.
- ✓ Judges and staff are reminded that compliance with security procedures protects not only them but also the voters. The integrity of the election process is not just required by the Election Code but is our primary goal for every election. The promise of a transparent, secure, and fair election has always been our standard.