




MEMORANDUM

Date: September 30, 2022

To: The Honorable Chair and Members
Pima County Board of Supervisors

From: Jan Leshner 
County Administrator

Re: **Updated Pima County Elections Department 2022 Primary Election After Action Report**

At the August 15, 2022 Board meeting, the Board requested that the Election After Action Report be reviewed by the Elections Integrity Commission (EIC) prior to transmitting it to the Board at their October 4, 2022 meeting. Attached is Elections Director Hargroves' memorandum on the September 23, EIC meeting and revised After Action Report.

From the information provided, two of the primary overarching themes in the comments received relate to confusion about the process and the new technology, both of which can be tied back to better training and communication. The report has been updated to reflect additional information received, corrections and responses to comments and recommendations from EIC members, as well as the Pima County Republican Committee.

Attachments

c: Carmine DeBonis, Jr., Deputy County Administrator
Francisco Garcia, MD, MPH, Deputy County Administrator and Chief Medical Officer
Steve Holmes, Deputy County Administrator
Constance Hargrove, Director, Pima County Elections
Diana Durazo, Senior Advisor, Pima County Administrator's Office



ELECTIONS DEPARTMENT

PIMA COUNTY GOVERNMENT

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Date: September 29, 2022

TO: Jan Leshar
County Administrator

FROM: Constance Hargrove
Elections Director

A handwritten signature in black ink, appearing to read "CH", is written over the name "Constance Hargrove".

RE: **After Action Report – Updates and Response to Election Integrity Commission (EIC) Recommendations**

Ms. Leshar,

I am submitting this memo in response to the EIC meeting and other comments about the election. I am also responding to the most common themes found in the comments.

First, confusion about the process was a common theme. Pollworker education and training will address many of the comments about election day. The pollworkers need to understand the process and why it is necessary. Helping pollworkers understand how the electronic pollbooks and printers fit into the process will also give them more confidence on election day. The office will address the various training needs by reducing class size and having returning pollworkers attend classes specific to their role on election day.

Second, confusion about the new technology in the vote centers. Pollworkers did not understand what to monitor during the day to ensure connectivity. Pollworkers also did not understand whether a printing problem was due to a connectivity issue or user error. Processing voters can encompass many scenarios on election day, but providing the pollworkers with the tools to ask the right questions will significantly improve the election day experience.

Lastly, there was confusion about where to find items and supplies to run the vote center on election day. The vote centers will have clear instructions on where to find supplies and other equipment.

Updates and Corrections

Corrections:

- **The incorrect delivery date for provisional ballot envelopes:** The after-action report has a date of August 3. The correct date of receipt is July 27.
- **Blue Ballot Box:** The report states that the blue ballot box has a zip tie and not a seal. That information is not correct. The blue ballot box contains a white seal that looks like a zip tie. The white seal has an imprint with the word Pima and a seal number. Both the gray and blue ballot boxes contain seals on election day.

Updates:

- **Sample Ballots:** Each vote center can print sample ballots upon request. Any voter may request a sample ballot from the pollbook officer. The pollbook officer will identify the requesters voting precinct printed on their voter card from the Recorder, or they can find the information in the pollbook. They can then print a sample ballot without processing the voter in the pollbooks.
- **Passwords:** The elections office only distributes passwords to operate the e-pollbooks to the vote centers on election day. The inspector distributes the passwords to pollworkers as needed. The Cradlepoint has a different password that is not universal throughout the County. If necessary, the elections office may provide the password to the voting equipment specialist or the troubleshooter on election day to connect replacement equipment.
- **Delta File Monitoring:** The elections department will assign a dedicated individual to monitor vote center connectivity on election day. The individual will also monitor delta file downloads to ensure all vote centers stay current throughout the day. The office can manually push delta files to individual touchpads if they are behind on downloads. Vote centers with long lulls between voters may require a manual push because of inactivity. However, training will instruct pollworkers to wake up the touchpads to ensure continuous file downloads periodically. Monitoring delta files and sideways communication is a priority for election day.
- **Provisional Ballot Envelopes:** The provisional ballot envelopes are packed and ready for deployment to vote centers.
- **Communication:** The elections department will add additional troubleshooters to address vote center calls on election day. The call center has two divisions to handle equipment and supply and procedural problems. The separation will reduce the response time to anyone experiencing a critical problem on election day. The elections department is also hiring additional intermittent employees to help answer calls from

After Action Report – Updates and Response to (EIC) Recommendations (Continued)

pollworkers before and on election day. The distribution of responsibilities and the expanded call center will ensure faster response times to address voter needs.

Response to EIC Recommendations

- The Pima County Republican Committee submitted recommendations in a report dated September 12, 2022. The Committee had four recommendations as follows:
 - **Hire a project manager/leader** – We now have a project manager from Tenex Software Solutions as of September 12. The project manager coordinates with the Recorder's office.
 - **Hire an integration and test lead** – The recommendation has a fiscal impact and requires adding a position to the elections department.
 - **Permanent test lab** – The recommendation has a fiscal impact and will require expansion of the office or moving to a different location.
 - **No WiFi in the vote center** – The recommendation has a fiscal impact as well as an impact on other departments within the County. The conversion requires a feasibility study and input from the vendor.

Commissioner Hurley recommends testing the e-pollbooks and printer connections on election morning and the night before. I accept the recommendation and will incorporate it into the procedures for the general election.

I have incorporated the updates, corrections, and responses to EIC recommendations in the attached revised After Action Report (Attachment A). I am also attaching a copy of the Pima County Republican Committee Report for reference (Attachment B).

ATTACHMENT A

Pima County

After Action Report August 2, 2022, Primary Election

Vote Center and Electronic Pollbook Implementation

Constance Hargrove, Elections Director
9-13-2022

Revised 9-29-2022

The Pima County Board of Supervisors requested an after-action report relating to the implementation of vote centers, e-pollbooks, and the conduct of the August 2, 2022, Primary Election. The after-action report addresses improvements and action plans for the November 8, 2022, General Election. The Recorder will respond to questions about voter registration and early voting.

The Pima County Board of Supervisors approved vote centers beginning with the August 2, 2022, Primary Election. The change to vote centers also necessitated using electronic pollbooks and ballot-on-demand printers. The change in voting method and new technology makes the August Primary unique from other elections conducted in Pima County. While the laws governing elections did not change, the preparation and tools necessary to conduct the election changed.

The after-action report provides a comprehensive analysis of the implementation that culminated with the August 2, 2022, Primary Election. The report provides answers within the context of the following categories:

- Presentation of the benefits of changing from precinct-based voting to vote centers
- Purchase, receipt, and testing of equipment
- Ballot stock, equipment, and pollworker allocations
- Training of pollworkers and other staff
- Supplies and equipment delivery
- Election Day
 - Support
 - Response
 - Closing
- Additional Comments and Questions

After Action Report

Expectations and Outcomes

Precinct-based voting versus Vote Centers

Expectation

The Recorder and County Elections provided initial information on the benefits and costs of shifting to e-poll books and Vote Centers for the 2022 Primary. The expected benefits included:

- Fewer provisional ballots
- Cost savings relating to the use of Vote Centers, e-poll books, poll workers, and ballots
- Faster final election results
- Voting security
- Voter convenience

Fewer Provisional Ballots

Outcome

The reduction of provisional ballots was based on the assumption that early voters could cast a regular ballot on Election Day if they had not returned their early ballot. Unfortunately, under current law, voters that receive an early ballot must vote a provisional ballot unless there is a real-time update of the voter registration database on Election Day. Pima County's e-pollbooks interface with a copy of the voter registration database housed in the Cloud. Pima County issued more provisional ballots because of the law and voter trends on Election Day. Ninety percent of the provisional ballots were cast were early voters. The total number of provisional ballots issued during the Primary Election in 2018 was 4,206 compared to 4,368 in 2022. It is important to note that there was a significant decrease in provisional ballots in all other categories. However, the new vote center model did eliminate provisional ballots for voting in the wrong precinct.

Improvement and Action Plan

The County will see a reduction in provisional ballots beginning with the November 8, 2022, General Election with the new law's enactment. Senate Bill 1460 revises the law requiring the issuance of provisional ballots to individuals that receive an early ballot. The law allows voters to receive a regular ballot if they surrender their early ballot. In addition, counties using e-pollbooks on Election Day may issue a regular ballot to voters that have not returned their ballot.

Substantial Cost Savings

Expectation

The estimated cost savings would be around \$200,000 annually (excluding purchasing the new voting equipment).

Outcome

The county saw a \$126,000 savings in election worker pay due to fewer locations to staff on Election Day. However, the expected cost savings are based on the 2020 general election and not a primary election, and it does not consider any additional cost of implementation. The initial savings projection does not include any contingency planning for Election Day. Elections did order printed ballots to have on hand for emergencies. In addition, the cost of leasing facilities to host vote centers increased due to size requirements.

Improvement and Action Plan

It is difficult to predict the cost of elections as the need changes based on the size and type of election. A primary requires fewer resources than a general election. Establishing a base cost for operating vote centers with the new voting technology requires a full election cycle. However, the Elections Department will look for ways to reduce leased space costs for training and Election Day.

Implementing a new system normally results in increased costs during the first year. After a full election cycle with vote centers and the new technology, the department will present a comparative cost analysis.

Faster Final Election Results

Expectation

Processing time after the election will be significantly shorter due to an 83% decrease in provisional ballots. In most years, processing provisional ballots take close to or at the deadline of 10 days after each general election. Due to the time it takes to process provisional ballots, Pima County is almost always the last county to finalize results and one of the only counties to go right to the deadline.

Outcome

The Elections Department does not have any statistical data from previous elections to make a comparison. However, the final results reporting depend on when the department receives ballots from the Recorder. The after-election process requires the verification of early ballots received at vote centers on Election Day and provisional ballots cast by voters. Voters dropped off nearly 20,000 early ballots on Election Day, with over 4,000 provisional ballots cast. The last batch of ballots was processed and scanned on August 11, and they conducted the post-election logic and accuracy test on August 12.

Improvement and Action Plan

Various factors determine how fast the County reports election results. The basis for the initial projection of an 83% reduction in provisional ballots was not issuing provisional ballots to early voters. However, the law during the Primary required early voters to cast a provisional ballot. Revisions to the law passed by the legislature allow voters that receive an early ballot to cast a

regular ballot on Election Day as long as they have not returned their ballot to the Recorder's office. The new law will reduce early ballots during the general election, reducing the time it takes to report final results.

Although there may be a reduction in the number of provisional ballots, it is impossible to project how many voters will drop off their early ballots on Election Day. Therefore, voter trends will largely drive the speed of results reporting. Communications will work with the Recorder and Elections to provide information to the public on provisional ballots and early voter ballots and their impact on election results. The campaign will include the Arizona Early Voting List (AEVL) information and how to get on and off the list.

Voting Security

Expectation

The use of e-pollbooks will eliminate the possibility that someone could vote twice. Pollworkers will print ballots for individual voters eliminating the stacks of preprinted ballots. Pollworkers will also know if a voter returned an early ballot.

Outcome

Yes, vote centers are secure because of the pollworkers that operate them and the technology. Security is both physical and cyber. Pollworkers are the first line of defense against any threats or breaches to the process, and they maintain the chain of custody of all equipment and ballots throughout the day.

Pima County vote centers use Tenex e-pollbooks and ballot-on-demand printers. The e-pollbooks, printers, and routers had no breaches on Election Day. Elections and the Information Technology Department (ITD) reviewed reports from the Cradlepoint (router) and the e-pollbooks after the election, and the reports do not show any unusual activity.

However, a lack of understanding of how transactions are processed created some concern after the election. Using e-pollbooks in vote centers reduces the chance that someone can vote more than once in an election. Elections and the Recorder understood the check-in process as real-time data transfer through the cloud server. E-pollbooks have sideways communication and cloud transfer of transactions from other vote centers—the sideways communication functions within the vote center between devices. Sideways communication is close to real-time as long as the devices are connected. The transfer of delta files is how the system communicates between vote centers throughout the County.

A delta file is a supplemental file created after the Recorder provides the primary file to the vendor. Any file created after the original file, such as voter registration updates, return of early ballots, or pollworker information, creates a delta file. In addition, each transaction on an e-pollbook or touchpad creates a delta file. All delta files transmit to the cloud server and back down to vote centers. A lack of understanding of the process created a scenario that could allow someone to check in more than once.

A review of the logs and other reports revealed that VC10 processed one voter more than once. However, the logs do not substantiate reports of other voters being checked in more than once. The inspector of the vote center acknowledges that one table checked in the voter, issued the ballot slip, and was sent to another table to be processed again. However, the inspector is unsure how they processed the voter at the second table. The e-pollbook operator had the option of spoiling the ballot and reissuing or reissuing it without spoiling it in the e-pollbook. The inspector does not believe the e-pollbook operator spoiled the ballot because they manually spoiled the ballots after realizing their error. The confusion began because the pollworkers did not know that the touchpads were connected to a specific printer. Therefore, they printed from different touchpads to issue the ballot. The voters were only given one ballot, and the pollworkers spoiled the other ballots when they discovered they were printing them twice.

Improvement Action Plan

The Recorder and Elections will ensure the downloading of any delta files created before election day. Downloading delta files will require adjusting the deployment process for the general election. It will also require vote centers to set up and test equipment the Monday before the election. Previously, the Monday setup was optional, but implementing the new equipment necessitates it. In addition, election staff will monitor touchpads to ensure delta file downloads are current throughout election day. Ensuring that delta files are current will prevent voters from checking in more than once. Adding these extra steps will increase data accuracy and security on election day.

Elections will also ensure that pollworkers have a better understanding of the e-pollbook and printer setup. Each e-pollbook gets assigned to a specific printer and Cradlepoint before deploying to vote centers. Training will also address spoiling and reissuing ballots.

The elections department will assign a dedicated individual to monitor vote center connectivity on election day. The individual will also monitor delta file downloads to ensure all vote centers stay current throughout the day. The office can manually push delta files to individual touchpads if they are behind on downloads. Vote centers with long lulls between voters may require a manual push because of inactivity. However, training will instruct pollworkers to wake up the touchpads to ensure continuous file downloads periodically. Monitoring delta files and sideways communication is a priority for election day.

Purchase, Receipt, and Testing of Equipment

Expectation

Elections and the Recorder were promised deliverables from Tenex Software Solutions, Inc. of equipment and training in sufficient time to prepare for and conduct the August 2 election.

Outcome

The contract did not specify a timeline for the promised deliverables, and it became increasingly difficult to establish a timeline due to supply chain issues. Those deliverables include equipment

delivery, training, and the implementation of the system. Tenex and Elections had weekly meetings regarding different components of the system's function and setup. Elections and the Recorder began receiving equipment in April. Elections received all e-pollbooks and Cradlepoint devices by the end of April. However, the receipt and ballot-on-demand printers did not have a delivery date. The company had to change ballot-on-demand printer vendors at the beginning of the year.

Elections received all equipment to operate the vote centers by June 30, and the staff received in-person training from Tenex in July. Elections, the Recorder, and ITD conducted testing of all equipment in preparation for the August Primary. The testing included Election staff, Recorder staff, and ITD physically visiting each vote center with the Cradlepoint and e-pollbook to test connectivity. The signal strengths varied in locations. As a result of the test, the vendor shared that using an external antenna can help boost signal strength. Elections purchased several antennae to install to help boost signal strength. All locations had signal strength in the acceptable range before election day.

In addition, the staff, with assistance from the vendor, performed acceptance testing and print test on all printers. Staff had limited time between July 1 and July 18 to test all equipment and prepare for the election. Staff worked nights and weekends to ensure they met the deadline to pack and deliver equipment to vote centers.

The testing and equipment preparation adds to the workload of preparing for an election. Elections did not plan for or add additional positions to accommodate the increased workload. However, the staff successfully tested, programmed, and deployed the equipment necessary to conduct the election within an expedited timeframe.

Improvement and Action Plan

The staff will conduct additional testing before the general election. However, setup and testing should be quicker now that the staff is familiar with the equipment. The estimated delivery date for the thermal receipt printers and printer tray adaptors is the end of September.

Ballot Stock, Equipment, and Pollworker Allocation

Expectations

Vote Centers will have enough ballot stock, equipment, and pollworkers to function efficiently, without interruption, and following Arizona law.

Outcomes

Ballot stock allocation considers various factors—the total number of precincts located within a vote center and past turnout. However, the initial order of ballot stock did consider past election turnout without considering overlap. Even though the turnout was less than the initial order of 100,000 blank ballot stock sheets, it was insufficient to provide the necessary allocation to all

vote centers. Additional ballot stock was ordered before the election, but time did not permit counting and distribution before election day.

As a result, Kirk-Bear Canyon Library ran out of ballot stock and had to close for two hours. Other vote centers also needed additional stock throughout the day. A sufficient quantity of ballot stock was available to distribute to vote centers, and no other locations closed due to a lack of ballot stock. There was also the mention of the ballot stock count not matching the total indicated on the Official Ballot Report. Ballot stock and ballots are counted by staff or prepackaged by the printer. It is normal to have a difference of one or more in the package. That is why inspectors have instructions to count their ballot stock and ballots when they open a package to verify the count and to make the correction.

All vote centers had adequate equipment to operate on election day, although there were some equipment problems during the day. Some vote centers experienced problems with connecting the printer to the e-pollbooks. The problem was more operational than equipment based. The pollworkers received instructions to turn the e-pollbooks off and back on, allowing the equipment to reconnect automatically. Some printers would not print because of a dip in the table that was corrected by having the pollworkers adjust the printer to a flat surface. The Elections Department does not supply tables to all vote centers, and the type of table in use that encountered the problems is unknown.

VC35 El Pueblo Senior Center had a calibration problem with their printer. They did not realize the problem until they printed several ballots. Pollworkers report that IT support was quick to respond to solve the problem.

Some vote centers experienced problems with connecting the Cradlepoint to the other devices. The Elections Department had to provide the Cradlepoint password to vote centers with connection problems. However, the staff did not distribute Cradlepoint passwords to all vote centers. It is unclear if the connection problem was due to the location of the Cradlepoint inside the vote center or if the pollworkers did not connect the devices in the correct order. Some connectivity issues may be due to the vote center location.

In addition, some vote centers complained of problems issuing provisional ballots and printing some ballots. Most problems issuing provisional ballots were due to the pollworker using the wrong password. The touchpad programming requires a basic password to check in voters receiving a regular ballot and a higher tier password to process provisional ballots. The higher tier password allows the e-pollbook officer to add or update voter information as law allows. The higher tier password also allows the pollworker to override a voter's political party registration to issue them another ballot. In addition, some transactions do not automatically select a ballot for the voter, requiring additional steps to issue a ballot. Other problems resulted from a lack of understanding of the process by both staff and pollworkers. The elections staff was unaware of the manual provisional process until election day. The vendor did not provide the information because the expectation was that a voter would not receive a party ballot different from their voter registration.

Each vote center had a sufficient number of pollworkers, but some did not have equitable party representation. Elections staff had challenges finding workers of the opposite party to staff some vote centers. Elections staff worked until the days before the election to fill slots with workers of opposite parties.

Improvement and Action Plan

Allocations of ballot stock have been increased to 25 to 30 percent of total voters to prevent vote centers from running out of ballot stock. Total voters include regular voters, provisional voters, and voters dropping off an early ballot. Planning for the additional voters is necessary because there is no way to predict whether early voters will choose to drop off their ballot or cast a regular ballot on election day. It is also impossible to predict turnout without any historical data. However, turnout information from the primary and general elections will provide a baseline for elections in 2024.

Projected voter turnout is also the basis for allocating voting equipment. Vote centers with a projection of 1,300 voters or less will receive two e-pollbooks and one e-pollbook to use at the special situation table. Vote centers with over 1,300 voters will receive three e-pollbooks and one e-pollbook for the special situation table. Any vote center receiving four or more e-pollbooks will receive two printers. The Elections Department is renting 80 e-pollbooks from Tenex to ensure an adequate supply for vote centers and to have some spares to deploy on election day. The extra e-pollbooks will also provide an adequate number of touchpads to use during training. Elections should receive the receipt printers by the end of September to deploy to vote centers. The receipt printers will reduce the time needed to record ballot information from the e-pollbooks.

Elections staff is currently reviewing pollworker assignments at all vote centers to ensure an equitable distribution of workers from the two major political parties. The Republican party has provided an extensive list of individuals willing to serve as pollworkers.

Training

Expectation

Pollworkers receive adequate training before each election, equipping them to conduct safe, secure, and fair elections. The training must cover voting procedures and voting equipment.

Outcome

The training provided before the election did not adequately prepare some pollworkers to conduct the election successfully. Much of the problem was that adequate planning did not happen when Elections acquired the e-pollbooks and ballot-on-demand printers. Staff scheduled training classes in January, but that schedule did not consider whether it was an adequate number of classes to implement vote centers and new voting technology. The schedule also did not consider the class size.

Class size was a critical factor during training. The class size made it difficult for everyone to practice using the equipment, and it was sometimes difficult to hear the instructor. The trainer made some mistakes and provided some misinformation while teaching some classes. However, the trainer did well with the technology portion of the training under difficult circumstances. The positive results of the technology training were evident on Election Day as the majority of vote centers functioned extremely well.

Elections received some feedback indicating that the content did not provide enough details on how to run the vote center.

Improvements and Action Plan

Training improvements will include increasing the number and types of classes offered and reducing class size. Beginning September 19, pollworkers will have multiple classes to choose from to meet their need. The Elections Director created the voting equipment specialist position to assist with technology needs during the Primary. However, some vote centers did not identify a specialist, and the elections department did not have a dedicated training class to prepare them. Voting equipment specialists now have dedicated classes to instruct them on the equipment's use and troubleshooting. New pollworkers, including those that worked the August Primary, will receive new pollworker training before the November General Election. Inspectors, marshals, judges, and clerks will have smaller classes. The goal is to have no more than 40 people per class.

The trainer is revising the curriculum for all classes based on feedback from inspectors and other pollworkers. He is reviewing and updating the procedures manuals for the General Election. The office will provide supervisory oversight to ensure the accuracy of the information provided.

Supplies and Equipment Delivery

Expectation

Vote centers have the appropriate supplies and equipment to conduct the election. Deliver all supplies and voting equipment before the polls open on Election Day, except in emergencies.

Outcome

The staff packed and delivered all voting equipment and most of the supplies to vote centers before election day. However, vote centers did not receive provisional and conditional ballot envelopes before the polls opened on Election Day. The printer encountered a supply chain issue and did not deliver the envelopes until the week before the election. Counting and distributing the envelopes with the other supplies was impossible. The troubleshooters were to deliver the provisional envelopes on election morning. Some voters had to wait for envelopes to vote on election day. Troubleshooters also delivered emergency ballots to most vote centers on Election Day. The printer did not prepackage the preprinted emergency ballots to send to vote centers. Permanent and intermittent employees counted ballots until the Monday before the election. The ballots consisted of 1,800 different ballot styles for 129 vote centers.

Improvements and Action Plan

Provisional and conditional ballot envelopes have been reallocated and are ready to be packed for vote centers. In addition, the staff spoke with the printing vendor to ensure that all preprinted ballots and ballot stock will arrive shrink-wrapped and boxed for deployment. The printer assures the office that they can print and box emergency ballots by precinct so that no counting and sorting are necessary.

The staff is reviewing, printing, and purchasing other supplies for the election.

Election Day

Expectation

Pollworkers expect support from the Elections and Recorder on Election Day to assist them in conducting safe, secure, and fair elections that provide every eligible voter the right to cast a ballot. Pollworkers and voters expect a prompt response to questions and problems on election day. Pollworkers provide an accurate accounting of what occurs on election day, including any discrepancies in the count at the end of the night.

Outcome

The elections call center did not have adequate staffing to handle the influx of calls Monday night and before the polls opened on Election Day. Many calls on Monday were about the receipt of equipment and the ability to open the cage. Some pollworkers could not set up until after 6 pm because the vote center was also an emergency early voting location. Pollworkers also overwhelmed the call center when they started calling in about not having provisional ballot envelopes.

Elections did not have an established protocol for technical support calls during the Primary. Before August 2, polling locations only had one piece of voting equipment to set up. Adding e-pollbooks and printers requires more resources than responding to ExpressVote issues.

The influx of calls and the lack of protocol led to long waits and frustration for some callers. Some vote centers called multiple times while waiting on supplies or support to arrive.

The response time was inadequate for vote centers more than thirty minutes from the election's office. It was especially problematic if the troubleshooter had to drive to the office and back to the vote center. Additionally, the tech team had to prepare equipment to deploy if someone needed a replacement or more touchpads. A lack of planning and the late receipt of equipment and supplies created a stressful situation for pollworkers and staff.

Many vote centers experienced problems and confusion closing the polls. Some vote centers did not properly close the e-pollbooks, and some closed and packed the e-pollbooks before recording the information on the Official Ballot Report. In addition, new inspectors did not understand

how to complete the closing paperwork. The lack of information or the recording of the information correctly gave the appearance that the vote center had a discrepancy in their ballot count. The new inspectors did not have clear instructions on what to do at the end of the night.

Improvements and Action Plan

Elections will address the support problem by increasing the number of call center operators for voter and supply problems and assigning a supervisor to handle problem escalation. Elections will also work with ITD to add a special line for technical support and increase the number of operators. Assign a supervisor to manage equipment replacement and deployment, as well as someone to monitor touchpad and Cradlepoint connectivity throughout the day.

Elections will solve the response problem by equipping troubleshooters with additional equipment and supplies to respond quickly to their respective vote centers. Establish a central dispatch to work with the main call center and the technical support supervisor to address problems efficiently.

The elections department will also add additional troubleshooters to address vote center calls on election day. The call center has two divisions to handle equipment and supply and procedural problems. The separation will reduce the response time to anyone experiencing a critical problem on election day. The elections department is also hiring additional intermittent employees to help answer calls from pollworkers before and on election day. The distribution of responsibilities and the expanded call center will ensure faster response times to address voter needs.

The closing process and paperwork are training issues that Elections will address in the revised training classes.

Additional Comments and Questions Asked

Clarity on Ballpoint Pens versus Sharpies

The controversy and concern about Sharpie brand markers do not apply to Pima County. The County has always used felt tip markers in precincts and voting locations to mark ballots, as has the Recorder's Office for early voting sites. Elections did not have any problems processing ballots during the 2022 Primary. However, to avoid confusion and alleviate concerns, the Elections Department will distribute ballpoint pens beginning with the November 8, 2022, General Election.

Sample Ballots Not Mirroring Actual Ballot

The 2019 Elections Procedures Manual (EPM) requires posting at least two sample ballots of each style at each polling location. However, the EPM removes the posting requirement for Vote Centers if the vote center can print sample ballots upon request (EPM). During the August

Primary Election, the sample ballots mailed to voters were in the same format as the actual ballots. Sample ballots sent to Vote Centers did not mirror the actual ballot format, which led to confusion for some. The sample ballot provided a list of all offices and candidates on the ballot for the Primary Election.

To provide sample ballots to vote centers, Elections changed the format to solve the space issue of posting 1,800 different sample ballots at each vote center. However, recognizing the need for access to all sample ballots, the Elections Department is exploring other options for posting sample ballots in Vote Centers for the November 8 General Election. Tenex has agreed to modify the watermark on test ballots to allow the printing of sample ballots. This is a temporary fix, and the County may incur an additional expense to create a permanent solution. The temporary solution allows vote centers to print a sample ballot on demand on Election Day.

Delays, Hour-long Waits, and Running Out of Supplies

As stated before, the delays experienced on Election Day resulted from a printing and supply chain issue. The Elections and Recorder's office redesigned the provisional ballot envelopes in 2021, and the order was placed with the vendor by former staff on December 21, 2021. The vendor received final approval to print on May 9, 2022. However, Elections did not receive delivery until July 27, 2022. The warehouse staff immediately began packaging the envelopes for distribution to the Vote Centers. Typically, supply deliveries begin two weeks before the election. Because of the late delivery, the only option was to deliver them on Tuesday morning. Delivering the envelopes took much longer than expected, causing delays at some vote centers. It is still unclear how long some voters waited for provisional ballot envelopes. The elections department is aware of three vote centers affected by the delay of envelopes. A complete accounting of affected vote centers is not available.

Aside from Vote Center 55 (addressed below), Elections is unaware of any other significant delays related to supplies on Election Day.

Vote Center 55 - Kirk-Bear Canyon Library experienced long wait times and lines when they ran out of ballot stock in the middle of the day. The inspector decided to direct voters to nearby locations instead of having them wait or utilize the other backup procedures. Going to another location would not have been possible in precinct-based voting. The inspector also sent a pollworker to support the nearby Vote Center, Vote Center 62 - Morris K. Udall Regional Center, to assist with the increased volume of voters. It was the appropriate decision considering the increasing wait times and volume of voters. The vote center could offer the use of the ExpressVote or issue printed backup ballots, but the sheer volume of voters would have caused an even longer increase in the length of lines and wait times. The vote center had a steady stream of voters throughout the day. Many voters chose to vote at the Udall site, but some decided to wait for the vote center to reopen. The vote center had a line around the building when they received the ballot stock. However, the line moved along quickly when they reopened, and they could process voters through the line in thirty minutes or less.

After the election, the Elections Director spoke with the inspectors of both vote centers. The inspector at Kirk-Bear Canyon Library explained the situation and the two-hour closure before

reopening. The inspector at Morris K. Udall Regional Center said she was thankful for the pollworker who accompanied the voters from Kirk-Bear Canyon because she was short-staffed. The leadership and decision-making of both vote centers speak to the proficiency of pollworkers in Pima County.

Elections received no additional complaints about long lines and wait times other than those above. Having lines at a voting location is normal when voters show up at peak times. However, the benefit of e-poll books is that they allow pollworkers to process voters through the line quickly. Vote Center 107 – Oro Valley Public Library was busy all day. They had the highest turnout with 860 voters and 116 provisional ballots. The pollworkers processed voters with a wait time of 30 minutes or less with a minimum number of e-poll books. Wait times will also decrease once pollworkers become proficient with the new technology.

Backup or Contingency Plan Activation

The contingency plan is in place to address situations when no other viable option is available. Vote centers within a one to three-mile radius of each other provide an option that was not available with precinct-based voting. Voters can go to another vote center instead of waiting in long lines, especially when they are on a tight schedule. For this reason, deciding to have vote centers close is a key part of the contingency plan.

The events at Kirk-Bear Canyon and some other vote centers with temporary printing issues did trigger the contingency plan. One vote center used the preprinted emergency ballots, while the other chose to offer the ExpressVote. The ExpressVote is the accessible ballot-marking device in each vote center. The majority of vote centers will receive two ExpressVote for the general election.

Questions on Federal Ballots Issued

Federal Ballots Issued to Independents

Federal only ballots should not be issued unless the voter has a Federal or a national flag associated with their voter registration. Any Independent voter issued a Federal only ballot without the associated flag or designation is a training issue. Pollworkers will receive more training on federal only ballots.

Difference between Federal Only and Provisional Ballots

A Federal Only ballot lists candidates for federal offices, such as United State Senate and Congress, for the current election year. Voters flagged by the Recorder's office with the federal or national designation qualify for a Federal Only ballot.

A Federal Only voter, also known as a National Voter, is an eligible voter who has not provided the Recorder's office with the appropriate proof of citizenship that qualifies them to vote a full Arizona Ballot. A Federal Only Voter is only eligible to vote a ballot that lists Federal offices.

A Provisional ballot can be a full or Federal only ballot, depending on the voter's registration status. Provisional ballots allow voters whose eligibility is uncertain on Election Day or who need to provide identification to cast a ballot. These ballots require verification by the Records office after the election. A voter may request a provisional ballot if:

- Their name does not appear on the e-poll book;
- Voter's information has changed with no update in the e-poll book;
- The voter is a part of the voter confidentiality program;
- Voter requests a different political party ballot;
- The voter was issued an early ballot.

Pollworkers, Poll Watchers, Poll Observers, and Boards Defined

Pollworkers

Pollworker is a term used to identify anyone who works in the vote center on behalf of Pima County on Election Day. It is a generic term describing all election board members. The A.R.S §16-531 states that the Board of Supervisors shall appoint one inspector, one marshal, two judges, and as many clerks as deemed necessary. The Statute also states that there shall be an equal number of inspectors in voting locations of the two largest political parties. The marshal, and the judge of the opposite party, represent the opposite political party of the inspector. The board also consists of the judge of the same party as the inspector: the inspector, marshal, judges, and clerks make up the election day board.

Poll Watchers

A poll watcher is not an official term defined in the statutes or EPM. However, individuals acting as poll watchers typically are affiliated with political parties and watch the activities outside a voting location on Election Day.

Poll Observers

The statutes and the EPM define poll observers as individuals appointed by political parties to observe the activities of the election process from early voting through election day. Political party chairs provide poll observers credentials and assign them to designated areas and voting locations. Poll observers represent political parties inside the office during early voting processing and ballot counting, and they serve inside vote centers on Election Day.

Boards

The statutes use the term board to describe the individuals appointed to perform certain functions throughout the election process. The EPM outlines and defines each board.

Early Board – processes early ballots in the Elections office;

Duplication Board – duplicates any ballots turned over to them by the early board.

Counting Board – scans the ballots processed by the early and duplication board.

Election Day Board – pollworkers serving in vote centers on Election Day.

Receiving Board – receive ballots and other supplies from vote centers in the Elections office.

Observers Not Allowed at Early Voting Sites

Observers were allowed at the ballot processing facility but not early voting sites. The Recorder has authority over early voting sites and has said there is not enough room in these sites for observers.

Provisional Ballots in the Blue Ballot Box

Pima County uses two different containers to hold ballots on Election Day. The gray metal box holds regular ballots voted on Election Day. The blue plastic box holds provisional and early ballots dropped off at the vote center. The inspector and other pollworkers monitor the ballot boxes to prevent anyone from tampering with them. The gray metal box has a numbered seal, and the blue ballot box has a white seal that looks like a zip tie. The white seal has an imprint with the word Pima and a seal number. Both boxes remain sealed and in clear view of the pollworkers until they begin the closing process.

The inspector assigns judges and clerks to open the ballot boxes and count the contents. The pollworkers complete the Official Ballot Report as they count the ballots. One copy of the Official Ballot Report goes in the gray ballot box with the counted ballots, which they lock, and reseal. The inspector places the provisional and early ballots in the designated return envelope and seals the envelope. The inspector and the marshal take the gray ballot box and the envelope containing the provisional and early ballots to the receiving station.

Comments from Pollworkers on New Voting System

Overall, the response from pollworkers and the public regarding vote centers and e-pollbooks was very positive. Pollworkers commented that they loved the new system, stating that it was an improvement from 2020 and that the e-pollbooks allowed for a faster and smoother process. Many added that the e-pollbooks were simple and easy to use and worked very well. Some examples of feedback we received regarding the e-pollbooks:

"Pretty easy to use, even for a tech challenged senior like myself," "Ipads rock," "Everything worked like a charm!" "I was impressed! Worked so well even for me who can't run a computer and usually jinx them," "Very easy to use," "The equipment was simple to work and set up and help others use as well," "Smooth and efficient," "Love the new system, so much easier," "Made the process more streamlined," "Very impressive-a wonderful step forward," and "Wonderful! Really reduced/eliminated any possibility of error."

Several pollworkers also noted that voters enjoyed the convenience of vote centers and the ability to vote at any location. There were very few complaints about the new polling locations from voters, and accessibility to a vote center did not appear to be an issue. There were a few complaints about the specific room in a location (for example, the gym at a school) being somewhat difficult for voters to find or access, but very few complaints from voters about the vote center locations. The voters I spoke to on election day looking for their nearest polling place were usually pleased to find out there was one very close to their location.

While there were some issues with the new technology throughout the day, most were easily resolved over the telephone. Typically, these issues were temporary and could be fixed by logging off/back on to the e-pollbooks, entering the correct information to log in to the e-pollbooks, or resetting the printer connection. The most common “complaint” from pollworkers regarding the e-pollbooks was that they needed more of them or expected to need more of them for the general election.

The majority of the complaints were about pollworker training and the manuals. Classes were too large, and not enough opportunity for hands-on training. Elections did not receive feedback from VC77 Pisenemo District about not being able to receive technical support for twelve hours. The vote center was operational, and the touchpads connected all day. The vote center had sixteen voters, and they did not have any discrepancies with their pollbook and ballot counts.

Key Issues Learned

- Training is a critical aspect of the process, especially when implementing new equipment. The training curriculum needs a major overhaul and planning and coordination. Historically pollworker training occurred the two weeks before the election. The result is classes of 100 to 300 people. There was no signup process for pollworkers to attend a class; they were free to show up at any class. More training is necessary for everyone involved in the process, including staff. Inadequate training can cause careless mistakes. These mistakes do not necessarily affect the outcome of an election, but they can create questions about the process. Some training-related issues included:
 - Some provisional and early ballots were left in a plastic bag and not sealed. (The pollworkers were possibly packing the provisionals at the end of the night and had not sealed the bag.)
 - Some pollworkers did not allow observers in vote centers
 - Some observers were not allowed to observe the opening and closing process
 - Misunderstanding of a Cradlepoint and the passwords supplied to vote centers;(All vote centers receive passwords for the touchpad, but they did not receive the password to the Cradlepoint. The passwords to the Cradlepoint were not the same for all vote centers.)
- The Elections Department better understands how the e-pollbooks communicate with each other and other vote centers. The office will implement a plan to better monitor the touchpad and delta file activity during the general election.
- The Elections Department needs better communication between the office and the vote centers to provide adequate support.

The improvements and action plans described above will be in place for the November 2022 General Election.

Response to EIC Recommendations

- The Pima County Republican Committee submitted recommendations in a report dated September 12, 2022. The Committee had four recommendations as follows:

- **Hire a project manager/leader** – We now have a project manager from Tenex Software Solutions as of September 12. The project manager coordinates with the Recorder's office.
- **Hire an integration and test lead** – The recommendation has a fiscal impact and requires adding a position to the elections department.
- **Permanent test lab** – The recommendation has a fiscal impact and will require expansion of the office or moving to a different location.
- **No WiFi in the vote center** – The recommendation has a fiscal impact as well as an impact on other departments within the County. The conversion requires a feasibility study and input from the vendor.

Commissioner Hurley recommends testing the e-pollbooks and printer connections on election morning and the night before. I accept the recommendation and will incorporate it into the procedures for the general election.

ATTACHMENT B

***OBSERVATIONS AND RECOMMENDATIONS FROM
THE AUG 2 PIMA COUNTY PRIMARY ELECTION***

SEPTEMBER 12, 2022

*Pima County Republican Committee
Christopher S. King
Levoy Hurley*

Why are we doing this?

The ultimate goal of any after action report should be to make sure that people can vote easily and have confidence in the process. People shouldn't be disenfranchised and people should trust the results of the Election. The Pima County Republican Party had Poll Workers, Election Aides and volunteer observers during the 2022 Primary Election. Therefore, we had people observing all aspects of Election Operations from early July through the completion of the Canvass. We collected a lot of data, and reports are still coming in as we prepare this report.

Summary Observations and Recommendations

2021/2022 was a period of turmoil and turnover for those administering Pima County elections - new Recorder, Elections Director, and supporting staff. Serious concerns were voiced by Republican leadership and members of the EIC about our county's ability to successfully pull off a major revision to how we vote in Pima County. Unfortunately, many of those concerns played out in the run-up to, and conduct of, the Aug 2 primary. Many of the problems we will discuss can be directly traced to holes in planning, testing, and training.

A number of issues can be traced to the new printers. It is clear that the vendor failed to validate these in a fully integrated, operational system. The Elections Department was warned by our EIC members about the potential for these issues.

Training was also a common thread. Many of our volunteers told us that they felt that instructors had little to no real experience working elections. Much of the material had not been updated for the new process and systems, and there was too much reliance on non-specific vendor documents.

Summary Recommendations

1. Project Manager/Leader. One person- ie, single point of contact (POC) - for the Vote Center Project. This person must be able to coordinate with the Recorder.
2. Integration & Test Lead. Someone with experience in IT systems, especially Test and Integration. The Vote Center systems and equipment will evolve over time and every change must fully tested.
3. Permanent Test Lab. Basically, this is a fully-functional Vote Center that can be used for testing new components or updates, validating new training and procedures, and training employees. Develop standardized test procedures for evaluating and/or validating any changes.
4. No wi-fi in Vote Centers. Hardwired connections are the most reliable. It is fairly inexpensive to connect all the VC devices via ethernet. Many of the VCs were in

locations where there was at least one competing wi-fi network, and these caused a few problems.

We received comments and observations from over 30 people about the Operations in the Voting Centers. With the exception of 2 reports, the other reports described problems with the following:

1. Opening Set Up

Poll Workers noted that the set up the night before was difficult and time consuming. 75 pound printer too heavy, opening and setting up EPollBooks, testing them. Some Vote Centers could not get the equipment to work especially the printers.

Two Vote Centers opened without functioning Ballot Printers. One called support to help get the printer to print the night before. Their call was not returned until 7 the next morning.

The other Vote Center didn't receive a replacement Ballot Printer until 10AM Election Day. They only had one printer - the only printer they had. Many voters turned away to other Voting Centers.

Poll Worker reported that the Inspector had called a meeting but not set up the night before. The Inspector did not know how to get the equipment to communicate the next morning and they barely opened on time.

2. Equipment and Supply Issues

One Observer documented that a voter came into his Vote Center and stated that he had been to THREE Voting Centers and no one could print him a ballot until he came this one.

Numerous Voting Centers did not have Provisional or Conditional Ballot envelopes until 8am on Voting Day. One Voting Center didn't receive them until 10am (HAVA Violation)

There were reports of inadequate supply of cables and/or chargers.

Box of Pre-printed Ballots were missing.

Two Vote Centers were shorted blank Ballot Stock - one counted 97 Ballots in a bundle labelled 100 and the other counted 18 missing from a box of 500.

Write-in List was missing. When the Observer mentioned it to the Inspector, the Inspector didn't follow up. He told the Observer "they never win anyway". The observer got

permission from the Inspector to speak to one of the Judges about it. The Judge called the Elections Hotline and they delivered a Write In List by noon (HAVA Violation).

Poll Worker reported Special Situations EPollBook down repeatedly and required Tech Support several times. Voters were told to come back later.

Several Voting Centers had problems with ballots jamming and figuring out what to do to print a second ballot for the voter since they had already hit "continue". Sent them to Provisional Table.

Problems with trying to print ballots at the same time with one printer. This caused voters to become angry, leave disenfranchised or sent to Provisional Table. Called the Elections hotline - couldn't solve problem over the phone. Sent a troubleshooter who fixed the problem (VC100).

Poll Workers did not know there was a different Password for the Provisional Table E-Pollbook.

From a Tabulation Room Observer - There were numerous ballots that had to be duplicated because the printer was out of alignment. One entire Voting Center's ballots had to be duplicated.

Several Voting Centers either almost or did run out of Ballot Stock. One Vote Center directed voters to another Voting Center near by for two hours. Need not have turned Voters away.

3. Training and Staffing - more training in handling problems that came up

Inspector reports significant problems with Poll Workers on his list backing out right before the August 2. Called the Election Office numerous times and could not get through. Concerned because he had 4 Democrats and 9 Republicans.

It is still not clear to Poll Workers and Voters which pens will work with Pima County Voting equipment

Observer reported a Voter being issued a regular ballot whose address did not match the Voter Roll without additional information.

Observers and Poll Workers witnessed many examples of Poll Workers who seemed unsure or uninformed about how to handle Spoiled Ballots or issue Provisional and Conditional Ballots (There were 307 Poll Worker/Vote Center Issues out of 4333 Provisional/Conditional Ballots).

Observers noted a lack of Privacy for Voters around the Special Situations Tables

Poll Worker: 2 voters who were eligible to vote were turned away by JSP at Provisional Table. Inspector did not intervene when informed (HAVA)

Voter turned away when the Special Situations Judge could not find the voter's address (HAVA)

Voter turned away because he lost his driver's license and couldn't produce and identification. He was with his wife. She voted and he should have been able to vote Conditional/Provisional(HAVA)

In one busy Vote Center, most issues at the Special Situations Table took 15-30 minutes to resolve.

Party Observers:

Even though Party Observers showed the Inspectors in writing that they allowed by statute to observe Opening and Closing, some Observers were prohibited by their Inspectors from observing the pre-opening process and couldn't watch the closing process either.

Several Observers reported being told by the Inspector to watch from a location that was too far away or obstructed so that they couldn't meaningfully observe. One Observer was 50 feet away. Some Inspectors were receptive to requests from the Observers for better viewing spots.

Some Observers commented that they couldn't tell if the Parties were represented fairly.

Marshals

Observer reports 3:30-7PM 30-45 minute wait times with only 2 EPollBooks.

Observer reported a voter who came into VC and began taking photos in the Voting Center. Inspector told her not to Poll Worker told the woman it was okay and she continued.

Observer reported Marshal failing to address voters who were yelling at the Poll Workers in the Vote Center.

4. Chaotic Closing

Poll Worker: "Unpacking and packing materials was a nightmare. The instructions used strange terms - what is this called and where does it go".

Poll Workers not informed by Inspector ahead of time what to do during Closing.

An observer was concerned about the security of Early Ballots and Provisionals. They are simply put in unsealed plastic bags, left on the table during clean up then placed in unsecured duffle bags to be dropped off.

From a Tabulation Room Observer - numerous Ballot Reports that came in with the ballots from the Voting Centers either lacked a Ballot Report, the Ballot Report was incorrect, or the Ballot Report was blank.

Two Vote Centers reported transporting ballots to Receiving Centers - one Inspector arrived to find no Supervisor or people to receive the ballots and equipment. Waited 30 minutes.

Receiving Center for Tollson Elementary School at 9PM - no one available to show Poll Workers where to put ballots, etc. 60 People standing around with ballot boxes on the ground

Voter Roll and Legal Issues

During check in it is alarming how many times Observers noted that voters who had NOT requested an Early Ballot were listed as having been sent one. In one Vote Center alone, during one four-hour shift, 15 people said they received a Ballot that they didn't request. These voters voted Provisionally.

Another Poll Worker reported lots of complaints about people receiving Early Ballots when they were not supposed to or receiving Early Ballots for people who no longer lived at that address or had passed away.

Early Ballots were accepted at an unauthorized location for 90 minutes. This occurred at an Early Voting Center that was supposed to be closed.

Chain of Custody issue: Poll Worker at one Vote Center reported that the JOP's accepted twice Early Ballots from drive by voters outside the Vote Center and brought them into the drop box. The JOP when questioned said that this happens all the time at this Vote Center.

The HAVA issues addressed above deserve repeating:

Poll Worker said 2 voters who were eligible to vote were turned away by JSP at Provisional Table. Inspector did not intervene when informed (HAVA)

Observer: Voter turned away when the Special Situations Judge could not find the voter's address (HAVA)

Observer: Voter turned away because he lost his driver's license and couldn't produce and identification. He was with his wife. She voted and he should have been able to vote Conditional/Provisional(HAVA)

Voting Centers Opening without Provisional Ballots noted by several Observers. Some didn't arrive until 10AM.

Observer reported Write-in List was missing from the Vote Center for six hours. When the Observer mentioned this to the Inspector, the Inspector didn't follow up. He told the observer "those people never win anyway". The observer got permission from the Inspector to speak to one of the Judges about it. That Judge called the Elections Hotline and the list arrived by noon.

Poll Worker and Election Department Troubleshooting Needs to be pervasively understood, documented and followed :

1. Low or NO Ballot stock and nonfunctioning printers needn't have been a huge issue OR shut down a Vote Center. The Contingency Plan discussed during the Vote Center implementation months is as follows:
 - A. Call Elections Hotline for more stock or another printer.
 - B. Let Voters use Express Vote Machine
 - C. Issue a preprinted ballot from shrink wrapped packages.**
 - D. If voters haven't checked in yet, go to another Vote Center.

This process was not followed in any Vote Center where we received observations.

NOTE FOR EMPHASIS: The failure to follow contingency procedures for using preprinted ballots was noted at multiple locations. The worst was Kirk-Bear Canyon library, which resulted in a VC shutdown of nearly two hours. This did not need to happen!

2. Wait times 30 minutes or more
3. Back ups at the Special Situations Tables.