A REPORT BY
THE 2017-2018 CONTRA COSTA COUNTY GRAND JURY
725 Court Street
Martinez, California 94553

Report 1803

Voting Security

Integrity and Transparency

APPROVED BY THE GRAND JURY

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Contra Costa County Grand Jury Report 1803

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TO: Contra Costa County Clerk-Recorder-Registrar

SUMMARY

The act of voting is central to our democracy. If citizens do not have confidence that their voting system provides accurate results, government risks losing its credibility.

Last year, media reports highlighted a range of potential issues affecting elections, including covert foreign influence on the American public, electronic intrusion (hacking) into voting systems, and alleged fraud. With this background, the Contra Costa County Civil Grand Jury (Grand Jury) investigated the voting system in the County, focusing on the voting process and system security to ascertain the ability of the County to deliver accurate election results. The Grand Jury did not perform a forensic study of cyber security. It did not address potential user interface issues such as ballot design. It did not deal with issues of covert influence on elections through social media or advertising.

Following its investigation, the Grand Jury concluded it has confidence in the integrity of the ballot process and accuracy of election results, and commends the paid County employees, volunteers, and temporary help who support the election process. Elections are the responsibility of the Clerk-Recorder's Office (CRO), which manages the election process and maintains the election equipment. The Grand Jury found a well-run operation maintaining cyber security and logistical security in accordance with current best practices. The election process is as transparent and accountable as is practicable, consistent with current law. The department has done an excellent job of maintaining smooth operations and creating cost savings to fund voting equipment replacement.

The County's voting equipment was in its end-of-maintainable-life phase. The Contra Costa County Board of Supervisors (BOS) voted on February 13, 2018 to approve the purchase of a new voting system as recommended by the CRO. The purchase is

covered by funds the CRO had already put aside for the purpose. Maintenance of the system over six years will be managed within current operational funding. The new system should be fully implemented in time for the June 2018 primary election.

The Grand Jury recommends that the CRO consider updating its business continuity plan and Memorandum of Understanding with Sacramento prior to the June 2018 election. The Grand Jury also recommends that the CRO consider completing its threat and vulnerability assessment, and implementing the resulting recommendations prior to the June 2018 election.

METHODOLOGY

In the course of its investigation, the Grand Jury:

- Reviewed public documents
- Reviewed facilities and equipment
- Researched press articles
- Interviewed election officials and volunteers
- Researched other states' election practices
- Attended accessibility training given by the department
- Participated in a public viewing of the vote counting procedure

BACKGROUND

Various voting methods are employed or have been considered across the United States: paper ballots available at polling sites, paper ballots delivered and returned through U.S. mail, e-voting (electronic voting at polling site) and i-voting (electronic voting over the internet). Any method used can lead to an improper outcome if there are voting process imperfections, voting equipment failures, individual fraud, or third-party intrusion into an insecure system. During the past two decades, the following issues and actions have been reported involving elections in the United States.

- The Help America Vote Act of 2002 made sweeping changes to the nation's voting process. It was seen as a response to revelations in the 2000 election of serious flaws in the nation's voting systems, voter access, and election administration (The Brennan Center for Justice report "America's Voting Machines at Risk," 2015).
- According to the Center for American Progress report "Election Security in All 50 States" dated February 2018 "…fourteen states use paperless DRE [direct recording electronic] machines in at least some jurisdictions. Five states rely

exclusively on paperless DRE machines for voting." According to a Washington Post report dated October 7, 2017, "In July, at the DefCon hacking conference, programmers successfully invaded 30 Direct Record Electronic (DRE) touch-screen machines, including some identical to those in use in Virginia, within 90 minutes." DRE machines do not have paper ballot backup. If a system is compromised, original voting records may not be recovered.

- In a February 8, 2018 interview with NBC News, "Jeanette Manfra, the head of cyber security at the Department of Homeland Security, said … in 2016, 'We saw a targeting of 21 states and an exceptionally small number of them [voter systems] were actually successfully penetrated.'"
- According to a Buzzfeed article dated March 22, 2018, "Homeland Security Secretary Kirstjen Nielsen called the need for new voting machines that produce a paper trail 'a national security issue.'" The omnibus spending bill passed March 23, 2018 by Congress provided money targeted to replace voting machines that did not leave an audit trail, as well as to implement post-election audits, provide cyber security training for state and local officials, and fund other election security-related improvements.

Paper ballots are generally considered by the experts to be the safest method of voting available. According to Lawrence Norden, Deputy Director of the Democracy Program at the Brennan Center for Justice at the New York University School of Law, "…the most important technology for enhancing security has been around for millennia: paper. Specifically, every new voting machine in the United States should have a paper record that the voter reviews, and that can be used later to check the electronic totals that are reported." (*The Atlantic*, May 10, 2017)

California and Contra Costa County have chosen to continue using paper ballots, which are available at polling places or sent by mail. Vote-by-mail (VBM) ballots are returned by mail or turned in by hand at polling stations. Ballots are tallied using optical scanning machines.

However, the process logistics and the voting system (software and hardware) the process uses are complicated. Therefore, continuous and rigorous attention to details and full transparency are vitally important. This investigation considered Contra Costa County's voting process and voting system, and its security implications to determine if continued confidence in the integrity of the ballot process and accuracy of election results is justified.

The CRO has recently purchased a new voting system to replace its current aging system. The new voting system has updated technology and additional features, but in terms of logistics, it is similar to the current system in its operation. This report will discuss the voting system and process that have been in place, and will note the new voting system changes that affect security.

DISCUSSION

A review of local press articles over the last decade shows that the Contra Costa County CRO, which manages elections, has no history of voting system security issues. Only two incidents were uncovered: one involved false voter registrations by a paid-to-turn-out-the-vote group, and the other was a double voting attempt using a loophole in a practice mandated by the State. Both incidents involved only a small number of votes and according to the CRO had no effect on the outcome of the election.

The 2016 presidential election was a good test of the voting system in Contra Costa County. More than 100,000 new voters registered for the election. With three paper sheets for each ballot, the system had to scan almost 1.5 million ballot sheets to tally the vote. Approximately 65% of all votes were vote-by-mail. State Election Code §15360 mandates an audit be completed of at least one percent of precincts in which paper ballots are manually counted and compared to the electronic tally. In the 2016 election, to cover all the different ballot types, Contra Costa County manually audited 29 out of 656 precincts (4.4%). The manual count tallied exactly with the electronic count.

There were 4,018 provisional ballots (over 0.8% of voters) disallowed due to non-registration. These are people voting in the wrong county or who do not realize the need to register when relocating to the County if they were registered elsewhere in California. State law in 2016 did not allow eligible voters to register and vote the same day. Assembly Bill 1436, a State law enacted in 2012, will go into effect this year to allow people to both register and vote on Election Day.

System Description

The Contra Costa voting system is comprised of three main activities:

1. Voter registration
2. Ballot logistics
3. Ballot creation and counting

1) Voter registration

A valid list of voters is critical to the election process. Voters apply to be registered to vote, either online through the State portal or in person at various locations throughout the County. Applicants must provide their California Driver License number, California Identification Card number, or Social Security number. Their signature is scanned. If the application is completed online, the signature used is the electronic version associated with the Driver License. A voter list is created by the County and shared with the State.

The County is broken up into different voting areas called precincts (700 as of January 2018). A precinct is an area used to group residents that vote on the same issues. The

voter list is combined with precinct geographical data. The combined data is used to create the mailing list for VBM ballots, and the roster for in-person voting for each polling location. Each person receives the ballot specific to his/her precinct.

2) Ballot logistics

VBM ballots are mailed directly to the voter from the certified mail service vendor, which prints the ballots. Vote-in-person ballots are warehoused in a secure County facility. The day before Election Day, trucks operated by at least two volunteers deliver ballots and optical ballot scanners for use in the polling locations. The trucks act as local depots for multiple polling locations. Each polling location Inspector, the person who manages the polling location, signs for and picks up the materials from the truck, and stores them at home overnight before taking them to the polling location. After the election, the scanners and the completed ballots are placed in secured containers, and returned to the trucks by the Inspector accompanied by another polling location worker. The materials are signed for and trucks return the materials to the warehouse for final tallying. With the new voting system, the equipment and ballots will be delivered directly to the polling locations. After the election, the data card with the electronic tally and the completed ballots will be returned in secured containers.

There are separate processes for the three types of ballots:

- Vote-in-person: People are checked against the voter roster specific to their polling station. They sign the roster, receive their ballot, and have their completed ballots scanned by machines in the polling places. After the polling location closes, the number of signatures on the roster is compared to the electronic record of ballots scanned. The tally from the optical scanners and the paper ballots are returned to the warehouse.
- Provisional: Voters at a polling station whose names are not on that voter roster can vote using a provisional ballot. The provisional ballot is counted but not scanned at the polling station. It is returned to the warehouse in a sealed envelope. If validated, the ballot is scanned by high volume optical scanners.
- Vote-by-mail: Returned VBM ballots are stored at the warehouse. If validated, the ballot is scanned by high volume optical scanners.

3) Ballot creation and counting

A software program is used to create the ballots, program the machines that optically scan the ballots to count the votes, and aggregate the resulting vote totals.

To aggregate the County vote totals, the electronic totals are recovered from the scanners returned from the polling stations. For VBM ballots and provisional ballots, the envelopes are run through a sorter at a secure warehouse. The sorter captures the name, address, and signature of the voter from each envelope. This information is

validated by comparing it with the data from the master list of registered voters to help ensure the votes are legitimate and there are no duplicate votes.

During the 2016 election, approximately two hundred volunteers extracted and prepared the ballots for counting. Validated ballots were taken to a separate secure facility and fed into high volume optical scanners. The count from these machines (VBM and provisional ballot tallies) was aggregated with the count from the polling machines (vote-in-person tallies) for a final total. The aggregated vote total is sent to the State. Paper ballots and envelopes are archived for twenty-two months.

Security

This report defines *security* to mean all measures taken to ensure an accurate return of voting tallies. It concentrates on these security areas:

1. Machine condition
2. Logistics security
3. Cyber security

1) Machine condition

Contra Costa County is in the process of implementing a new voting system. Until very recently, the voting system in the County consisted of Election Systems and Software (ES&S) equipment: Unity Election Management System (EMS) software, M100 optical scanners, M650 high speed optical scanners, and the Automark Voter Assist Terminal (VAT), which is a ballot-marking device with support for alternate languages and the disabled.

The voting system had been reaching the end of its maintainable life. The M100 and M650 optical scanners and the Automark VAT are 10-11 years old and using obsolete technology. The Brennan Center of Justice's 2015 report "American Voting Machines at Risk" surveyed vendors, experts, and users regarding voting equipment age and maintainability. For voting equipment manufactured since 2000, these respondents reported usable life spans to be 10-15 years. After that, the machines became increasingly unreliable. Users reported optical scan and touch screen registration issues, intermittent connectors, failing memory boards, obsolete storage technology, and paper jams.

Supplies were difficult to find and the CRO was reduced to using eBay to find system storage drives. The County reduced the number of polling locations three years ago, which freed up machines for spares.

New voting systems were recently certified by the State for use in California. The CRO conducted a study of the available systems and made a purchase request to the BOS.

The request was unanimously approved by the BOS at the Board meeting on February 13, 2018. Trials of the new equipment began in March 2018, and County-wide implementation is expected in June. The new voting system should eliminate age-related issues and will also help prepare the County to respond to new legislation.

The County is purchasing the Democracy Suite voting system from Dominion Voting Systems. The Suite replaces the Unity EMS with the Democracy Suite EMS. It replaces the Automark equipment with the ImageCast Evolution optical scan tabulator and ballot marking device. It replaces the M100 with the ImageCast Precinct optical scan tabulator, and the M650 with the ImageCast Central count system. The CRO will need to review its security procedures based on the new equipment. At the time of this writing, the CRO is preparing a threat and vulnerability assessment, which will cover the new systems and procedures.

2) Logistics security

Logistics security encompasses safeguards to the voting process, physical security of facilities, ballots, system equipment and electronics pre-vote, during voting, and post-vote. It also includes cross-checks to the system.

Only two process incidents have been uncovered: one involved false voter registrations by a paid-to-turn-out-the-vote group, and the other was a double voting attempt using a loophole in a practice mandated by the State. Neither of these had an effect on the election outcome. According to an *East Bay Times* article dated August 15, 2016, the Clerk-Recorder "claimed that 113 people successfully voted twice in the primary election… At issue is whether voters in Contra Costa who come to polling places on Election Day wanting a different ballot from the one they were issued through the mail should be required to fill out provisional ballots." According to the article, the Secretary of State's office said the requirement to fill out a provisional ballot is against state law. The article noted that a legal alternative is to print out and distribute the VBM rosters, which could be used to check whether they had already voted.

The Contra Costa County District Attorney's office has four open investigations involving improper voting activity. One is a felony relating to someone who was allegedly paid to register voters and who allegedly registered fictitious voters. Sixteen registration forms were found by the DA's investigation to be fictitious. The other three open investigations are misdemeanors where a person is alleged to have voted twice.

Voter list

The list of registered voters forms the foundation of the election system. A new state-wide voter registration system, VoteCal, was brought online in September 2016 to replace the previous system, named CalVoter. VoteCal includes the State's approximately 19.4 million (in 2017) registered voters. It interacts with, and exchanges information with, various state and county information systems to update the voter registration list (per California Secretary of State, 2016) including:

- County Election Management Systems (EMS): to exchange voter information between State and County. All 58 counties are connected to VoteCal. Counties use their EMSs to register voters and update voter information, which is then uploaded to VoteCal. Changes at the State and county level synchronize with each other. Counties are notified of any State-level changes for verification purposes. Registration information is maintained redundantly at the State and County for security.
- California Department of Corrections and Rehabilitation: persons with felonies are excluded or removed from registration rolls.
- California Department of Public Health: exclusion of deceased persons from registration rolls.
- California Employment Development Department: address change information for voter registration records.
- California Department of Motor Vehicles (DMV): address change information for voter registration records and use of applicant's DMV signature electronic record. The signature is appended to the voter's application.

Contra Costa County maintains its own voter registration database on County-owned servers in the event the State system goes offline or is impacted by outside agencies. This enhances the security of the voter registration data.

From a security perspective, VoteCal has three main differences from the previous CalVoter system which may lead to more vulnerability: 1) More access is allowed (each county can now see all data whereas before a county could only see its own data), 2) there is an update mechanism that did not exist before (the State can now automatically update county voter lists), and 3) the DMV is now connected to the system. This may create greater potential for cyber disruption and potential fraud. While this is a State security issue, the County may have to implement new procedures on its end to manage updates securely.

Facilities

The County facilities that house the election system and materials are secured three ways: a) key card access, with sensitive areas additionally protected by b) a key code alarm system and c) video cameras. They appear to be adequately protected.

The elections system

Prior to the election, polling locations are surveyed by the CRO to ensure compliance with the American Disabilities Act (ADA). The CRO trains poll workers in operations, accessibility practices, security, and voter support through in-person classes and a comprehensive reference manual. All software on all machines is deleted and freshly

installed from a verified copy of the software. Voting machinery is aligned and rigorously tested across all combinations of ballots and candidates.

The elections-system software and vote-tabulating equipment are never connected to the internet, and have no wireless connection capability.

Security for the voting electronics and completed paper ballots in transit to, at, and from the polling locations is enforced through use of equipment locks and carrier bags, each with numbered, tamper-proof security tags. These tags are logged and materials signed for each time the materials change hands. The CRO maintains chain of custody documents. More than one person must accompany these items at all times. The only exception is when Inspectors take the ES&S electronics and ballots home with them the night before the election, and then to the polling locations the following morning. Inspectors are selected from experienced volunteers and must undertake a training course. The Dominion equipment is managed differently. It is built as a big rolling cart, and is delivered directly to the polling location. The main concern of the vote-in-person process logistics occurs when the trucks gathering the electronic data and ballots from polling locations return them to the central location. Any accident destroying a truck could wipe out both the electronic data and the paper ballots from multiple polling locations.

At polling locations, the combination of locks and security tags on machines make it difficult for someone to tamper with the equipment. During voting, the voting machines are always in plain sight of the poll workers and the voters.

Handling of the completed ballots is managed in a secure County warehouse using volunteers. Mail-in ballots and provisional ballots are run through a sorting machine. The sorting machine electronically captures the voter's name, address, and signature from the outside of the envelope. That information is compared to the County's EMS records to ensure that: a) only registered voters have voted, b) their signatures match their vote application, and c) they have not voted more than once. County staff open the envelopes and place them in boxes. The boxes are brought to two volunteer teams, each consisting of two members, who must stay seated. One team member removes the ballots from the envelopes, ensures the envelopes are empty, and counts and bundles them. The second member unfolds and counts the ballots. The team then swaps tasks, and recounts and records the numbers. Staff observe the process, and remove the envelopes and box of ballots. The entire process has staff oversight and the facility has security cameras.

The boxes of counted ballots are then placed on enclosed trolleys, and are accompanied by two people to the central elections facility for high speed scanning and counting. The press and the public are welcome to watch both the ballot handling and vote-counting processes.

A three-tier process is used for validating mail-in and provisional ballots. Volunteers use the EMS system to compare the voter's name, address, and signature taken from the

envelope to the data in the voter registration list. Discrepancies are flagged for CRO staff review. If the staff person also believes there is a discrepancy, it is referred to managers to make the final determination. Only managers can disallow a vote. Unsigned ballots are not counted.

Signatures are not validated for in-person voters at polling locations. The voter rosters from the polling locations include barcodes identifying each voter. These barcodes are scanned to record that the persons voted, but their signatures are not checked. This is because there is no way to associate a signature on a roster to that person's ballot as the ballot is anonymous.

Validation

The County voting system has several validation checkpoints. For in-person voting, the polling locations' electronic vote counts, the count of paper ballots, and the total number of signatures on the voter roster are cross-checked. All discrepancies are documented and researched. Discrepancies are prioritized by volume. If the volume is insignificant to the election, the discrepancy may be just documented.

For VBM and provisional ballot cross-checking, the sorting machine counts the number of envelopes handled, which is compared to the envelope slicers' count of the number of envelopes opened. The extractors count the number of ballots removed from the envelopes, which is compared to the high-speed optical scanners' count of the number of ballots scanned. The number of ballot sheets is compared to the total number of envelopes. There will be less, as people do not always return all ballot sheets when voting.

The CRO carries out an audit of at least one percent of the precincts. In an audit, paper ballots are manually counted and compared to the electronic record. The CRO conducts a lottery to determine which precincts to audit. If any additional precincts are needed to audit all ballot races, they are then added by the Clerk-Recorder staff. Counting is conducted by teams of two volunteers, each supervised by staff. The public is invited to view both the lottery and the count.

Contingency plans

Procedures to handle issues arising during the election process are covered by a reference manual provided by the CRO to volunteers and staff. Anything not covered by the manual can be referred to a command center which supports all operations during the election. Complex issues are escalated to CRO managers who are on hand to make any necessary decisions.

Power for the equipment in the central location is backed up by a generator for the building, with additional battery backup for servers and networking equipment. Data is backed up daily, with one copy onsite and another to the cloud. The voting system is backed up at various points before, during, and after an election. Copies of the backup

reside on redundant voting system servers. An additional copy is stored on an external drive in a fire-proof safe.

The department's business continuity plan (systems and procedures to continue business in the event of system failure) includes a reciprocal agreement with Sacramento County to provide vote counting services to each other in the event of need. Both counties use the same voting system. The CRO will need to update its plan and the Memorandum of Understanding with Sacramento to reflect any changes necessitated by the new voting system. The plan should be tested to ensure that it works and all parties understand their duties.

3) Cyber Security

Cyber security is designed to protect against electronic intrusion (hacking) into the voting system to alter an election outcome. Altering the election by electronic intrusion requires an entry point or connection, and the ability to alter software or data. Potential targets include the County EMS software, the voter registration list, and the voting tallies.

California Election Code §19205 requires that the election system must not be connected to the internet and must not operate a wireless connection. Contra Costa County adheres to this requirement. The EMS software resides in a secure room on an internal wired network that is not electronically connected to any other internal system or to the internet. Prior to each election, software on the entire voting system is deleted and freshly installed from a verified copy of the software. No physical media (data devices) used by the system are ever allowed outside the secure room unless in use. All software updates and all input data (voter list, precinct geographical data, and voting data from the precinct optical scanners and the central high-speed scanners) are brought to the EMS on physical media. Final voting tallies are exported from the EMS on physical media. Voter identification information from the sorting machine (name, address, and signature) is delivered from the warehouse to the facility on a dedicated data line.

While the software that controls the vote-counting optical scanners is totally isolated from the internet, this is not true of the voter registration list. The County EMS is connected to the State's VoteCal using a secured State data connection through a County and State firewall. Registration list data is encrypted during transmission. VoteCal gets electronic input from other State entities. Security for those interconnections is the responsibility of the State. The Secretary of State is responsible for maintaining VoteCal system security. The County will need to review security procedures at its own level.

Planning for the Future

Senate Bill 450 (SB450), known as the California Voter's Choice Act, passed in 2016. The bill defines a new voting model, but compliance is not mandatory. It will allow

counties, on a county by county opt-in basis, to change the voting process to replace the current precinct model of voting with a new “vote center” model. The stated aim of the law is to improve voter turnout. Under the law, VBM is encouraged. All registered voters will get a VBM ballot in the mail. They can also vote in any vote center in the County. There will be fewer vote centers than precinct polling locations, but the vote centers will be open more days prior to the election. Under this law, each county is encouraged to solicit community input regarding acceptance and implementation of SB450.

According to the Senate Rules Committee Office of Senate Floor Analyses 8/25/2016, “…the provisions of this bill are modeled after the way that Colorado conducts its elections. … Fully implemented for the 2014 elections, this hybrid system resulted in Colorado achieving one of the highest voter turnouts in the nation.”

Orange County trialed the vote center model in 2016. Fourteen counties, not including Contra Costa, have been authorized to trial the model prior to 2020. Contra Costa, and the remainder of the counties, may choose to adopt the model for 2020 or later elections. As of February, four of the fourteen counties have chosen to trial the SB450 model.

If adopted by Contra Costa County, the key elements of SB450 and voter impact in the County would be:

- Every eligible voter will receive a mailed ballot 29 days before Election Day.
- In-person voting will be available in a limited number of locations:
    - one vote center for every 50,000 Registered Voters will be open for ten days before Election Day
    - one vote center for every 10,000 Registered Voters will be open for four days before Election Day
    - one secure drop off location for every 15,000 Registered Voters will be open for ten days before Election Day

A County citizen will be able to vote or drop off a ballot at any vote center in the County. A voter can register and vote on the same day.

The CRO says the newly purchased Dominion voting system will be able to support the SB450 requirements.

The County has not yet determined whether it will implement SB450. Cost will be an issue. SB450 still mandates keeping both VBM and in-person voting systems. It increases the cost of VBM voting by mandating the mailing of a VBM ballot to all registered voters. In the County's case, it may also increase the cost of in-person voting. The County currently has trouble finding locations willing to provide multiple-day usage for its current six non-County owned early voting locations. Finding dozens of locations

that would require extended hours and additional staffing would increase cost and logistical issues. The County is waiting to see the impact that SB450 has on the four counties that are planning to adopt it, before it decides whether to implement SB450.

FINDINGS

F1. For the last ten years, there have been no reported significant security or voter fraud issues with County elections.

F2. The CRO is following good cyber security and logistical security practices, with a process that is as open and accountable as is practicable under current law.

F3. The County's voting machinery is reaching the end of its maintainable life, but the County expects to implement a new system for the June 2018 election. The CRO had put aside sufficient funds for a new voting system and recommended one for purchase, which the Board of Supervisors unanimously approved.

F4. Vote-by-mail is the more secure method of voting in the County, simplifying logistics and avoiding the “single point of failure” where a traffic accident could wipe out all voter records for multiple polling locations.

F5. Implementation of SB450, the California Voter’s Choice Act, is not mandated. Before determining whether to implement the law, Contra Costa County is waiting to see how the law affects other counties that have chosen to implement the law, especially as it relates to the optimal number of voter centers and drop-off locations needed.

F6. The implementation of VoteCal, the new State-wide voter registration system, introduces the facility for automated updates, and it is now connected to the DMV.

F7. The CRO is preparing a threat and vulnerability assessment of the new system, which is planned to complete prior to the June 2018 primary election.

F8. The CRO follows good practice in system redundancy and backup, and has a business continuity plan with Sacramento County to provide reciprocal vote counting support since each county has the same voting system. The Memorandum of Understanding and plan covering the agreement are not yet updated to include the new voting system.

RECOMMENDATIONS

R1. The CRO should consider completing its threat and vulnerability assessment of its overall operation, and implement any recommended changes to its procedures per its current timetable – prior to the June 2018 election.

R2. The Grand Jury recommends that the CRO consider updating its business continuity plan and Memorandum of Understanding with Sacramento County prior to the June 2018 election, and then test the plan's effectiveness on a regular basis.

REQUIRED RESPONSES

	Findings	Recommendations
Contra Costa County Clerk-Recorder's Office	F1, F2, F3, F4, F5, F6, F7, and F8	R1 and R2

These responses must be provided in the format and by the date set forth in the cover letter that accompanies this report. An electronic copy of these responses in the form of a Word document should be sent by e-mail to ctadmin@contracosta.courts.ca.gov and a hard (paper) copy should be sent to:

Civil Grand Jury – Foreperson
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P.O. Box 431
Martinez, CA 94553-0091