

**CITY AND COUNTY OF SAN FRANCISCO
PILOT PROGRAM PLAN
NOVEMBER 8, 2022 STATEWIDE GENERAL ELECTION**

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February XX, 2022

Honorable Dr. Shirley N. Weber, Secretary of State
California Secretary of State's Office
1500 11th Street
Sacramento, California 95814

RE: Application for conducting pilot program in San Francisco authorized under California Elections Code Section 19209

Dear Secretary Weber:

Enclosed is a proposed plan to conduct a pilot program in the City and County of San Francisco (City) under California Elections Code Section 19209 during the November 8, 2022, Statewide General Election.

This plan represents the City's application requesting your approval to conduct a pilot program using ballot marking devices and ballot scanner developed using open source software by the vendor VotingWorks. As described under Section 19209(d), the City is required to submit the enclosed program plan on or before February 8, 2022, which is within nine months of the election date.

This plan follows San Francisco Board of Supervisors President Shaman Walton's letter dated August 11, 2021, indicating the City will seek to implement a pilot program. Included within the plan is an overview of the steps the City will undertake to fulfill the requirements regarding the conducting of a pilot program with a voting system not yet certified by your office.

We look forward to collaborating with your office while meeting the requirements and completing the processes necessary to conduct this pilot program.

I will be glad to answer any questions or provide additional information.

Respectfully,

John Arntz, Director

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I. BACKGROUND/JUSTIFICATION

The pilot program will fulfill policies set by San Francisco's Board of Supervisors and Elections Commission supporting open source voting systems. The San Francisco Board of Supervisors passed an ordinance, File Number 211303, authorizing the City's Director of Elections to submit this plan to the Secretary of State requesting approval to conduct a pilot program during the November 8, 2022, Statewide General Election (see Attachment 1).

II. FACTS AND PROVISIONS/LEGAL REQUIREMENTS

California Elections Code Section 19209 "authorizes a governing board to provide for the experimental use of a voting system in one or more precincts without formally adopting the system and provides that the experimental use of the system at the election is valid for all purposes as if it were lawfully adopted." See Attachment 2 for full statement of Section 19209.

Accordingly, the City approved the above-mentioned ordinance authorizing a pilot program using ballot marking devices and ballot scanner in San Francisco to occur during the November 8, 2022, Statewide General Election, and requiring this plan be submitted to the Secretary of State for review within nine months of the election date (on or before February 8, 2019). After submission of this plan, the Secretary of State has three months to approve or reject the plan. This plan provides an overview of the pilot program using specifications known at this time.

Other provisions required by Elections Code Section 19209 include:

1. Meeting the requirements of regulations adopted by the Secretary of State for conducting pilot programs involving an open source voting system that is not certified for use in California.
2. Ensuring that the number of voting system units do not exceed fifty (50) percent of the estimated number of units that would be required for full deployment of the voting system at every polling place and early voting site in a statewide election throughout the jurisdiction;
3. Notifying the Secretary of State in writing of any defect, fault or failure of hardware, software or firmware within thirty (30) days of completion of the pilot program; and,
4. Implementing a risk-limiting audit or a full manual tally for ballots cast using the ballot marking devices from VotingWorks. A "risk-limiting audit," as described, "means a procedure that ensures a large, predetermined minimum chance of requiring a full manual tally would show an electoral outcome that differs from the outcome reported by the voting system for the audited contest."

The VotingWorks System

To conduct the pilot program, the City will utilize three components of the open source voting system from the vendor VotingWorks: VxMark, VxBatch, and a VxBatch laptop. All three components are operated by the VxAdmin election management system. See Attachment 3 for images of these components.

The use procedures for the system, see Attachment 4, provide the following descriptions of the components:

1. VxMark is an accessible BMD with an attached printer that produces a voter-verifiable paper ballot. Specifically, it is a Lenovo Flex (or equivalent) laptop with VotingWorks VxMark open-source software installed on it, and the printer is an HP 404n printer. VxMark will be utilized as the in-person marking method for voters at the City Hall Voting Center.

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2. VxBatch will be utilized for tabulating BMD (VxMark) printed ballots for the purpose of the partial risk-limiting audit only. Voters at City Hall Voting Center will use VxMark to mark, print, and verify their ballot. Ballots will be cast into a ballot box at City Hall Voting Center like other ballots cast using the Dominion voting system in San Francisco. VotingWorks marked ballots will be copied to Dominion formatted ballots for central tabulation.
3. VxBatch: a central scanning laptop (HP Elitebook 840 or equivalent) used for rapidly scanning ballots in batch at a central location. A Fujitsu 7160 or 7800 scanner is connected to VxBatch for high-speed batch scanning.
4. VxAdmin: VxAdmin is the main tool for local election officials. It serves as an election management system (EMS), results tabulator, ballot on-demand printer, and central scanner. The VxAdmin laptop (HP Elitebook 840 or equivalent) is installed with VotingWorks VxAdmin open-source software. VxAdmin will be utilized for programming Ballot Marking Devices (BMDs) (VxMark) and reporting results for the purpose of the partial risk-limiting audit and manual tallies only.

III. IMPLEMENTATION OF PILOT PROGRAM

- A. Defining the election and creating ballots
 - B. Set up the election and ballot marking device
 - C. Testing: Acceptance and Logic and Accuracy
 - D. Staging ballot marking device in City Hall Voting Center
 - E. Placement of scanner in central tabulation area
 - F. Voting process involving VotingWorks ballot marking device
 - G. Handling envelopes of ballots cast at the City Hall Voting Center
 - H. Transferring voter intent from VotingWorks ballots using Dominion ballot marking device
 - I. Personnel will scan Dominion ballots using scanners connected to the Dominion system
 - J. All votes cast on VotingWorks ballot marking device will be reported via remade Dominion ballots
 - K. Personnel will scan VotingWorks ballots on VotingWorks scanner
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- A. Defining the election and creating ballots
 1. The Department will provide VotingWorks with the jurisdiction-specific information necessary to define the election and create ballots, including for ranked-choice voting contests. This information includes precinct, district, and ballot type relationships and content regarding candidates, contests, and ballot measures, and translations of content into Chinese, Filipino, and Spanish.
 2. VotingWorks will set up the election in its system, which includes its election database, central scanner, and ballot marking device (BMD).
 3. VotingWorks will create four versions of the audio ballots using the content provided by the Department.
 - a. Cantonese
 - b. Mandarin
 - c. Filipino
 - d. Spanish
 - B. Set up the election and ballot marking device
 1. After defining the election and creating ballots, VotingWorks will program its election management system and BMDs to conduct the election.
 2. VotingWorks will proof all settings and content and indicate the system and components are ready for Department review.
 3. Department personnel will proof the ballot content on the BMDs, including audio, and determine if the BMDs provide all ballot content and audio as required.
 4. VotingWorks will generate ballots for logic and accuracy testing representative of all ballot types to test the central scanner and results reporting for accuracy.
 - C. Testing: Acceptance and Logic and Accuracy
 1. VotingWorks intends to conduct acceptance testing of its election management system, ballot marking devices, and central scanner during logic and accuracy testing.
 2. After VotingWorks completes acceptance testing, Department personnel will conduct logic and accuracy testing using the test cards generated from the system. Department personnel will also review the ballot content that appears on the screens of the BMDs and which is available in audio formats.
 3. Logic and accuracy testing will include ranked-choice voting contests.

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- D. Staging ballot marking devices in City Hall Voting Center
 - 1. The Department customarily places one BMD in its front office which is adjacent to the ground-floor foyer in which the Department organizes the Voting Center.
 - 2. The space inside the office allows for a more private voting session in relation to the space in the foyer which hosts voters in line to receive ballots, voters interacting with Department personnel, voting booths, media, etc.
 - 3. Since Elections Code section 19209 stipulates the number of units of the experimental system cannot exceed 50% of all equipment at a location, the Department intends to place one or two BMDs from VotingWorks in the front office space.

- E. Placement of scanner in central tabulation area
 - 1. Each election, the Department stages 16 central tabulators from Dominion in a secure room and will include one scanner from VotingWorks in this space as well.
 - 2. After logic and accuracy testing, the Department intends to keep the scanner in one location in the secure room.

- F. Voting process involving VotingWorks ballot marking device
 - 1. The voting experience for voters who use the VotingWorks BMD will be similar to the experience of voters using the Dominion BMD.
 - 2. Voters will first complete an application to have a ballot issued to them at the Voting Center.
 - 3. The established practice to issuing ballots at the Voting Center is, after verifying a voters' records or assisting a voter to register or update registration information, Department personnel will inform voters that they will be given a paper ballot unless the voters choose to use an accessible ballot marking device. This statement to voters aligns with the policy set by the San Francisco Elections Commission that all voters be provided with paper ballots unless they choose to use a ballot marking device.
 - 4. If voters decide to use a ballot-marking device, the Department's personnel will inform voters that they can use the devices provided by Dominion, or the device provided by VotingWorks as part of a pilot program.
 - 5. For voters who choose to use the VotingWorks BMD, Department personnel will print a label stating the voters' registration information, attach the label to a return vote-by-mail envelope, and obtain a poll worker card and escort voters to the BMD.
 - 6. At the VotingWorks BMD, Department personnel will insert the poll worker card, then select the ballot type appropriate for the voters, and also select a language, if necessary.
 - 7. Voters will follow instructions provided on the screen or through headphones to navigate ballot content and vote.
 - 8. When voters complete their sessions, voters will print their selections using a printer connected to the BMD.
 - 9. Voters place their printed ballots into the return envelope, remove the tape covering the self-sealing adhesive, and insert the envelope into a ballot box located near the BMDs.

- G. Handling envelopes of ballots cast at the City Hall Voting Center.
 - 1. Department personnel will transfer ballot boxes from the Voting Center to another area in the Department where envelopes are scanned and signatures are captured for verification.
 - 2. After signature verification, Department personnel will place envelopes into equipment that opens the envelopes to allow personnel to extract the ballots.

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3. When Department personnel see a ballot generated from a BMD, personnel will place both the envelope and ballot in a tray designated for ballots needing review.
 4. A manager or lead will review ballots placed into the trays and will separate the BMD printouts from other ballots.
 5. A manager or lead will move the printouts to the “remake” teams who will transfer voter intent from the VotingWorks ballots into a Dominion BMD.
 6. If VotingWorks BMD ballots are not separated from regular ballots during the extraction process, the personnel who prepare the regular ballot cards for scanning will observe the VotingWorks ballots and these personnel will place the VotingWorks printouts in a tray indicating items need review. Personnel will quickly notice the difference between the two ballots: the VotingWorks BMD printouts uses 8.5 X 11 inch office copy paper and regular ballots are 8.5 X 16 inches and printed on 90 pound card stock.
 7. If VotingWorks BMD ballots are also not separated by the personnel who prepare ballot cards for scanning, the personnel who conduct a quality control review of ballot cards prior to scanning will likely observe such instances and will remove the VotingWorks printouts and place them in a tray for further review.
 8. If any VotingWorks BMD ballots were not identified prior to the ballot scanning, the personnel who place ballots would observe the VotingWorks ballots when handling cards prior to scanning. The BMD ballots would be separated and placed in tray indicating the need for review by a manager or lead.
- H. Transferring voter intent from VotingWorks ballots using Dominion ballot marking device
1. The Department will incorporate the transfer of voter intent from the VotingWorks BMD ballots to Dominion BMD ballots (Attachment 5) into existing remake procedures.
 2. The Department assigns personnel to comprise the remake teams through an election cycle.
 3. The personnel assigned to the teams usually have worked with the Department during previous elections and understand not only the remake process, but understand and have been involved in most other processes regarding ballot handling and tabulation.
 4. For remaking VotingWorks BMD ballots, personnel will use Dominion BMDs to transfer voter intent onto ballots the Dominion system can tabulate and include in the official results reports.
 5. Managers or leads for the Ballot Distribution Division will bring the VotingWorks ballot printouts from the extraction area to the ballot remake area.
 6. The personnel who will transfer the intent from the VotingWorks ballots onto Dominion ballots will enter voters’ selections into Dominion BMDs.
 7. After printing the Dominion BMD ballots, the remake personnel will write their initials, date, and a number that is sequential in relation to the remake at the bottom of both the Dominion printout and the VotingWorks printout.
 8. Each team maintains a sequential numbering of all ballot remakes during each day. This means the numbering at the bottom of the VotingWorks BMD printouts will be relative to the numbering sequences starting and ending with each day in the election cycle.
 9. After transferring voter intent, and initialing and numbering each printout, Department personnel will organize the VotingWorks’ printouts separately from all Dominion ballots.
 10. The separated VotingWorks ballots will be organized so that they can be readily identified during the Official Canvass.

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- I. Personnel will scan Dominion ballots using scanners connected to the Dominion system
 1. Department personnel will scan the Dominion ballots to which voter intent was transferred from the votes cast using the VotingWorks BMDs.
 2. Personnel will designate a container specifically for storing the Dominion ballots remade from VotingWorks ballots.
 3. The remade cards will be assigned batch numbers and included on the ballot manifest.

- IV. Risk-limiting audit and manual tally
 - A. As required under California Elections Code Section 19209(e) the Department will apply risk-limiting auditing reviews of each contest on the ballot and voted using the VotingWorks BMD.
 - B. The audit will follow the Secretary of State's regulation on risk-limiting audits, see Attachment 6.
 - C. The Department will conduct a partial risk-limiting audit applying a 90% probability the ballots will require a full manual count and using the ballots cast on the VotingWorks BMD.
 - D. The audit will be conducted as a single-phase review since the audit will include all ballots cast on the VotingWorks BMD.
 - E. The Department will utilize one ballot manifest for the risk-limiting auditing of the VotingWorks BMD ballots since all of this category of ballots will have been processed prior to the audit.
 - F. The Department will incorporate the VotingWorks BMD ballots into the Department's ballot custody procedures, see Attachment 7.
 - G. When using 10-sided dice to select precincts and batches for manual tallies during the Official Canvass, the Department will also randomly select the 20-digit seed number to input into the risk-limiting tool, see Attachment 8.
 - H. The Department will also manually tally all votes transferred on ballots using the Dominion BMD and compare the manual tally to results reports generated by the VotingWorks central scanner.

- V. Retention of ballots voted in the pilot program
 - A. The Department will retain all ballots used in the pilot program for 22 months as required under California Elections Code Section 17301 since federal contests will appear on the ballot for the election.
 - B. The record retention list will specify which boxes and pallets contain the voted and remade ballots.