SECRETARY OF STATE

CONDITIONAL APPROVAL OF
LOS ANGELES COUNTY’S
Voting Solutions for All People (VSAP) 2.1
VOTING SYSTEM

Whereas, pursuant to Elections Code section 19202, no voting system, in whole or in part, may be used unless it has received the approval of the Secretary of State; and

Whereas, Los Angeles County submitted an application for the VSAP 2.1 voting system, which is comprised of Tally 2.2.2.31, Ballot Marking Device (BMD) Version 1.6, FormatOS Version 1.6.1, BMD BASI Version 1.6, BMD BESI Version 1.6, BMD Manager (BMG) Version 1.5, VSAP Ballot Layout (VBL) 1.1.3, Enterprise Signing Authority (ESA) Version 1.0 and the IBML ImageTrac 6400 High Speed Scanner, submitted on or about February 27, 2020; and

Whereas, a series of tests of the voting system were conducted by the Secretary of State’s office and the state approved testing consultant, against the California Voting System Standards, and California law; and

Whereas, the voting system executed all test cases, scenarios, and scripts developed by the Secretary of State’s office; and

Whereas, the request for approval of the voting system as described above was considered at a public hearing held August 31, 2020, online; and

Whereas, written public comment was taken through September 15, 2020; and

Whereas, upon implementation of the conditions set forth below, the voting system satisfies the accuracy, accessibility, usability, and security standards set forth in the California Voting System Standards and California law.

Therefore, I, Alex Padilla, Secretary of State for the State of California, find and determine, pursuant to Division 19 of the Elections Code, as follows:
For the reasons set forth above, Los Angeles County’s VSAP 2.1 voting system is hereby conditionally approved.

Use of Los Angeles County’s VSAP 2.1 voting system must comply with all California Election Code and California Code of Regulation requirements and is also subject to the following terms and conditions:

1. For the November 3, 2020 General Election and subsequent elections, every active registered voter in Los Angeles will be mailed a paper ballot that they can hand mark. For those voters who vote in-person and request to cast a hand-marked paper ballot, Los Angeles County shall make available in each vote center a sufficient number of blank write-in paper ballots. The paper write-in ballots shall, at a minimum, contain all elements consistent with the Federal Voting Assistance Program’s federal write-in absentee ballot and comply with state law. Any write-in ballot cast at a vote center shall be secured in a ballot secrecy envelope identifying the ballot style or precinct, placed in a secure ballot box and shall be processed as a regular ballot during the canvass period.

2. Los Angeles County is prohibited from installing any software applications or utilities on any component of the voting system that have not been identified and approved by the Secretary of State.

3. Within five business days of this conditional approval, Los Angeles County shall provide to the Secretary of State the final version of its Use Procedures, entitled “Voting Solutions for All People Use Procedures for Version 2.1.” Within five business days of receipt, the Secretary of State shall review and either approve or return the Use Procedures to Los Angeles County for further revision and resubmittal within two business days. Compliance with the Use Procedures by Los Angeles County is a condition of the approval of this voting system. Compliance with all requirements set forth in the final Use Procedures is mandatory, whether or not a particular requirement is identified in this approval document.

4. The system shall be utilized in a configuration of parallel central election management systems separated by an "air-gap" where a permanent central system established to be running unaltered, certified software and firmware is used solely to define elections and program voting equipment. The system shall be formatted and reinstalled from the certified software after every election.

5. No substitution or modification of the voting system shall be made with respect to any component of the voting system, including the Use Procedures, until the Secretary of State has been notified in writing and has determined that the proposed change or modification does not impair the accuracy or efficiency of the voting system sufficient to require a re-examination and approval.
6. Los Angeles County shall deposit an exact copy of the trusted build files to a State of California approved escrow facility within 10 business days of this certification. These build files along with the source code and all associated software and firmware shall be escrowed in a California approved source code escrow facility, pursuant to California Elections Code section 19212. Pursuant to California Code of Regulations section 20641, within five business days, Los Angeles County shall certify to the Secretary of State that it has placed the software in escrow.

7. Immediately after any repair or modification of any voting system component that requires opening the housing, the integrity of the firmware and/or software for that component must be verified using an automated mechanism, or all software must be reinstalled by the jurisdiction using the approved firmware and/or software version supplied directly by the Secretary of State before the equipment can be put back into service.

8. The voting system contains no external connections of any type, this includes but is not limited to wireless and modem transmissions, to any device utilized for communication by or with any component of the voting system. No component of the voting system or any device with network connectivity to the voting system, may be connected to the Internet, directly or indirectly, at any time.

9. Upon request, members of the public must be permitted to observe and inspect, without physical contact, the integrity of all externally visible security seals used to secure voting equipment in a time and manner that does not interfere with the conduct of the election or the privacy of any voter.

10. Los Angeles County shall preserve the audit logs of each ballot marking device used in an election, for 22 months after the election.

11. Election workers in a vote center shall not participate in any post-election manual count auditing of results from the vote center in which they were an election worker, except for permanent Los Angeles County employees.

12. Los Angeles County shall develop appropriate security procedures for use when representatives of qualified political parties and bona fide associations of citizens and media associations, pursuant to their rights under Elections Code section 15004, check and review the preparation and operation of vote tabulating devices and attend any or all phases of the election. The security procedures must permit representatives to observe at a legible distance the contents of the display on the vote tabulating computer or device. This requirement may be satisfied by positioning an additional display monitor or monitors in a manner that allows the representatives to read the contents.

13. With respect to any part or component of the above described voting system for which the chain of custody has been compromised, the security or information has been breached or attempted to be breached, or experiences a fatal error from which it cannot recover gracefully (i.e., the error is not
handled through the device’s internal error handling procedures with or without user input, such that the device must be rebooted or the device reboots itself to restore operation), the following actions shall be taken:

a. The Los Angeles County Registrar of Voters shall be notified immediately of any suspected or documented occurrence;

b. The Secretary of State shall be notified immediately upon validation of such an occurrence by the Registrar of Voters;

c. If the occurrence is validated, the equipment shall immediately be removed from service and replaced if possible;

d. If the device is a ballot marking device:

i. Any voted ballots contained within the device, at the time of occurrence, shall be removed and secured.

1. A record of the number of voted ballots removed and secured shall be created and maintained as part of the official canvass; and

2. A report of a 100% manual count of those ballots removed and secured shall be maintained as part of the official canvass.

e. If the device is a scanner or tabulator, the results from ballots scanned or tabulated on the device shall be cleared from any accumulated results and the ballots rescanned on a different device. In addition, the ballot counts from the device shall be saved as part of the election record and retained for the full election retention period.

f. An image of all device software and firmware shall be stored on write-once media and retained securely for the full election retention period; and

g. All device software and firmware shall be reinstalled from a read-only version of the approved firmware and software supplied directly by the Secretary of State before the equipment is placed back into service.

14. The Secretary of State reserves the right, with reasonable notice to Los Angeles County, to modify the Use Procedures used with the voting system and to impose additional requirements with respect to the use of the system if the Secretary of State determines that such modifications or additions are necessary to enhance the accuracy, reliability or security of any of the voting system. Such modifications or additions shall be deemed to be incorporated herein as if set forth in full.

15. The Secretary of State reserves the right to monitor activities before, during and after the election at any vote center, warehouse, satellite location, central tabulation location, or the registrar of voters’ office, and may, at his or her discretion, test the voting equipment.

16. Voting systems certified for use in California shall comply with all applicable state and federal requirements, including, but not limited to, those voting system requirements as set forth in the California Elections Code and the Help America Vote Act of 2002 and those requirements incorporated by reference in the Help America Vote Act of 2002. Further, voting systems shall
also comply with all state and federal voting system guidelines, standards, regulations and requirements that derive authority from or are promulgated pursuant to and in furtherance of the California Elections Code, the Voting Rights Act, and the Help America Vote Act of 2002 or other applicable state or federal law when appropriate.

17. Voting system manufacturers or their agents shall assume full responsibility for any representation they make that a voting system complies with all applicable state and federal requirements, including, but not limited to, those voting system requirements as set forth in the California Elections Code, the Voting Rights Act, and the Help America Vote Act of 2002. In the event such representation is determined to be false or misleading, voting system manufacturers or their agents shall be responsible for the cost of any upgrade, retrofit or replacement of any voting system or its component parts found to be necessary for certification or otherwise not in compliance.

18. The VSAP 2.1 voting system is for the exclusive use of Los Angeles County at this time.

19. Prior to the disposal or sale of this voting system or portion thereof, all equipment shall be cleared with a minimum of a two-pass wipe so that no software, firmware or data remains on the equipment. At the time of disposal or sale, the equipment shall be returned solely to a non-functioning piece of hardware and the following documented for each:
   a. Whether the equipment is void of all software, firmware and data;
   b. The hardware model name;
   c. The hardware model number;
   d. The hardware serial number; and
   e. The persons and entity, if any, that voided the equipment of the software, firmware, and data.

20. Voting systems certified for use that utilize a barcode or QR code for tabulation shall be subject to the following:
   a. Jurisdictions shall develop procedures and conduct training for poll workers, prior to every election, regarding voter verification of barcodes or QR codes used for tabulation.
   b. In conducting pre-election testing pursuant to Elections Code section 15000, the jurisdiction shall validate the logic and accuracy of the barcodes or QR codes used for tabulation.
   c. In conducting a one percent manual tally pursuant to Elections Code section 15360 or a risk limiting audit pursuant to Elections Code section 15367, the jurisdiction shall perform a further review of any ballot examined pursuant to those sections that contains a barcode or QR code used for tabulation. The further review shall verify that the information contained in the QR code or barcode matches the voter verified, human readable text.

21. Los Angeles County shall submit in writing prior to each election, an attestation and verified HASH, identical to the Secretary of State’s trusted build SHA-2 512-bit HASH.
22. The "System Audio Sounds" functionality shall not be enabled.

23. Los Angeles County shall submit an attestation to the Secretary of State prior to each election confirming that the VBL ballot files were successfully validated against ECBMS (election preparation) data prior to ballot printing and ballot marking device loading.

24. By June 30, 2021, Los Angeles County shall provide documentation to the Secretary of State that demonstrates that Los Angeles County is either:
   a. Using only validated FIPS 140-2 cryptographic modules in VSAP 2.1 and any subsequent versions;
   b. All cryptographic modules that are used in VSAP 2.1 and any subsequent versions are FIPS 140-2 validated; or
   c. The VSAP 2.1 and any subsequent versions cryptographic modules meet or exceed standards consistent with FIPS 140-2.

25. By June 30, 2021, Los Angeles County shall encrypt the VSAP voting system components as described in the plan submitted to the Secretary of State on July 24, 2020. The system shall be subject to review by the Secretary of State. If Los Angeles County cannot successfully implement full disk encryption without documented impact to the system's accuracy, efficiency, or performance, the Secretary of State reserves the right to require Los Angeles County to undergo an external independent security audit at Los Angeles County’s expense, but procured by the Secretary of State.

26. The County shall apply updates and configuration changes to remediate the findings set forth in the Consultant’s Security and Telecommunications Report within 10 days from the date of this approval and submit the changes to the Secretary of State for administrative approval. If the County is unable to apply the updates and configuration changes within that time, then the County shall submit to the Secretary of State documentation outlining why the changes cannot be made, how the changes would impact the system’s accuracy and efficiency, if at all, and the County’s plan for applying the updates and making the configuration changes.

27. Los Angeles County shall proof all audio and language files during logic and accuracy testing and submit an attestation to the Secretary of State upon completion of logic accuracy testing and prior to any election that all required languages are valid, complete and present in the ballot marking devices.

28. By October 1, 2021, Los Angeles County in partnership with the Secretary of State shall develop a plan to make the source code of the Voting Solutions for All People voting system available and open, which appropriately addresses concerns related to the security of making the source code available and open. The plan shall include, at a minimum, how the County will inventory and track
components and vulnerabilities, how timely updates and patches of components will be made, and how the County will ensure ongoing active involvement from the open source community.

29. For any election where the ballot marking devices are used, Los Angeles County shall provide:
   a. Notice to voters, in all applicable California Elections Code Section 14201 languages, in advance of the voting period and at all vote centers in a manner that complies with California law on:
      i. How to properly feed ballots into the ballot marking devices; and
      ii. Verifying selections on the ballot marking device, after printing the ballot and before casting their ballot.
   b. Training to all poll workers on:
      i. Proper insertion of ballots into the ballot marking device for ballot marking and casting;
      ii. How to properly clear and log ballot jams and paper misfeeds; and
      iii. Informing voters about verifying selections on the ballot marking device, after printing the ballot and before casting their ballot.
   c. A sufficient quantity of back-up ballot marking devices and mobile support technicians to support vote center activity.

30. For any election the VSAP 2.1 system is used in whole or in part, Los Angeles County shall provide a report to the Secretary of State within 30 days from the close of canvass, which identifies:
   a. A copy of the content of training and the number of poll workers trained;
   b. A copy of any notice provided to voters as described in condition 28 above;
   c. A summary of the total number of ballots cast using ballot marking devices;
   d. A summary of the total of all errors, ballot jams and misfeeds;
   e. A report which identifies any occurrence of a white screen event, and includes the device inventory identification, a copy of all logs, and chain of custody documentation for the subject device(s);
   f. An inventory of devices that experienced errors, ballot jams or misfeeds including the serial number and whether the device was taken out of service; and
   g. A copy of all logs, including chain of custody logs documenting any and all errors, ballot jams and misfeeds.
IN WITNESS WHEREOF, I hereunto set my hand and affix the Great Seal of the State of California, this 1st day of October 2020.

ALEX PADILLA
Secretary of State