

Date of Hearing: August 13, 2013

ASSEMBLY COMMITTEE ON ELECTIONS AND REDISTRICTING
Paul Fong, Chair
SB 360 (Padilla) – As Amended: August 6, 2013

SENATE VOTE: 27-9

SUBJECT: Certification of voting systems.

SUMMARY: Makes significant changes to procedures and criteria for the certification and approval of a voting system. Expands the use of Voting Modernization Fund monies and authorizes a county to use those monies to purchase a conditionally approved voting system, as specified, for research and development of a nonproprietary voting system that uses disclosed source code, as specified, or to manufacture a limited number of voting system units for use in a pilot program, as specified, or for submission to the Secretary of State (SOS) for certification, as specified. Requires the SOS to adopt and publish regulations, as specified, governing the experimental use of a voting system in a pilot programs. Specifically, this bill:

- 1) Provides all of the following are the intent of the Legislature:
 - a) All voting systems be certified or conditionally approved by the SOS, independent of voluntary federal qualification or certification, before they are used in future elections to ensure that the voting systems have the ability to meet accuracy, accessibility, and security standards;
 - b) The SOS adopt and publish testing standards that meet or exceed federal voluntary standards set by the United States Election Assistance Commission (EAC) or its successor agency;
 - c) The SOS study and encourage the development of voting systems that use nonproprietary source code and that are easy to audit;
 - d) A local jurisdiction may use available public funds to purchase and maintain any certified or conditionally approved voting system or part of a voting system;
 - e) California receives the benefits of the publicly funded development of a nonproprietary voting system in the state; and,
 - f) A local jurisdiction may use available public funds to research and develop a nonproprietary voting system that uses disclosed source codes, including the manufacture of a limited number of voting system units, for use in a pilot program or for submission to the SOS for certification.
- 2) Recasts and revises various procedures and criteria for the SOS's approval of voting systems by changing the term "approval" to the term "certification" and authorizes the SOS to certify, conditionally approve, or withhold approval of a voting system.

- 3) Clarifies that the SOS is responsible for certifying voting systems for use in this state.
- 4) Requires the SOS to adopt and publish voting system standards and regulations governing the use of voting systems. Requires the standards to meet or exceed federal voluntary voting system guidelines set forth by the EAC or its successor agency. Provides that until state standards are adopted, Voluntary Voting System Guidelines Draft Version 1.1, as submitted to the EAC on August 31, 2012 shall be used as state standards to the extent that they do not conflict with the provisions of this bill. Permits the SOS to require additional testing to ensure that voting systems meet the requirements of this code. Requires voting system standards adopted by the SOS to include, but not be limited to, all of the following requirements:
 - a) The machine or device and its software shall be suitable for the purpose for which it is intended;
 - b) The system shall preserve the secrecy of the ballot;
 - c) The system shall be safe from fraud or manipulation;
 - d) The system shall be accessible to voters with disabilities pursuant to existing law and;
and,
 - e) The system shall be accessible to voters who require assistance in a language other than English if the language is one in which a ballot or ballot materials are required to be made available to voters pursuant to existing law.
- 5) Requires the SOS to study the performance of voting systems in use in the state.
- 6) Provides that any voting system that has been tested and approved for use in all elections by the SOS before January 1, 2014, shall be deemed certified or conditionally approved by the SOS and may be used in an election subject to any conditions placed on the use of the voting system by the SOS before January 1, 2014, including conditions imposed in the reapproval documents issued by the SOS in 2007 and 2008 following the Top-to-Bottom Review, and its subsequent revisions. Requires the voting systems described above to remain subject to review and decertification by the SOS at any time.
- 7) Provides that any vendor or county that has submitted a voting system for federal qualification before August 1, 2013, upon obtaining federal qualification before January 1, 2015, may request approval of the voting system from the SOS based upon examination and review requirements in place prior to January 1, 2014.
- 8) Prohibits a jurisdiction from purchasing or contracting for a voting system unless it has been certified or conditionally approved by the SOS. Permits a local jurisdiction, notwithstanding the above restriction, to contract and pay for the following:
 - a) Research and development of a new voting system that has not been certified or conditionally approved by the SOS and uses only nonproprietary software and firmware with disclosed source code, except for unmodified commercial off-the-shelf software and

- firmware, as defined; or,
- b) Manufacture of the minimum number of voting system units reasonably necessary for either of the following purposes:
 - i) To test and seek certification or conditional approval of the voting system; or,
 - ii) To test and demonstrate the capabilities of the voting system in a pilot program as specified.
 - 9) Permits the SOS to grant conditional approval to a voting system or part of a voting system under either of the following circumstances:
 - a) A voting system or part of a voting system was decertified as a result of a review by the SOS; or,
 - b) A certified voting system or part of that voting system is modified to comply with voting system standards or changes in statute.
 - 10) Permits the SOS to withdraw conditional approval of a voting system at any time, as specified.
 - 11) Repeals a requirement for the SOS to notify the EAC or its successor of a defect, fault, or failure of voting system, as specified.
 - 12) Repeals provisions of law that permits the SOS to employ three expert technicians to examine a voting system, and instead requires the SOS to use a state-approved testing agency, as defined, or expert technicians, to examine and test voting systems or parts of voting systems proposed for use or sale in the state.
 - 13) Requires the SOS to publish and make publicly available on his or her Internet Web site a quarterly report of regulatory activities related to voting systems.
 - 14) Requires the SOS, prior to publishing a decision to certify, conditionally approve, or withhold certification of a voting system, to provide for a 30-day public review period and conduct a public hearing. Requires the SOS to provide notice of the hearing on his or her Internet Web site. Requires the SOS to provide written notice of the hearing at least 14 days, instead of 30 days, prior to the public review period and hearing, as specified.
 - 15) Requires the SOS to make publically available a report stating whether a voting system has been certified, conditionally approved, or withheld, within in 60 days, instead of 30 days, after the completion of the examination. Requires the SOS, within 10 days after issuing the above report, to make available to the public a full and complete copy of the certification report and all associated documentation. Prohibits portions of the report or documentation that contain information that the SOS determines to be confidential or proprietary from being made publically available.
 - 16) Defines the following terms for purposes of this bill:

- a) “Commercial off-the-shelf” to mean mass-produced, readily available hardware devices, including card readers, printers, or personal computers, and their firmware or software products, including operating systems, programming language compilers, or database management systems;
 - b) “Incorrect in part” to mean a full manual tally of the votes cast on the pilot system would reveal rates of error in the pilot system tally that, if extrapolated to the entire contest, would alter the electoral outcome;
 - c) “Partial risk-limiting audit” to mean a procedure that guarantees a large minimum chance of a full manual tally of the votes cast on the pilot system if the electoral outcome is incorrect in part; and,
 - d) “Risk-limiting audit” to mean a procedure that ensures a large, predetermined minimum chance of requiring a full manual tally whenever a full manual tally would show an electoral outcome that differs from the outcome reported by the voting system for the audited contest.
- 17) Authorizes a governing board, without formally adopting a voting system, to provide for the experimental use of a voting system in a pilot program held in one or more precincts at a single election or, in the case of a special election, the special primary election and the special general election, if the voting system complies with either of the following:
- a) The voting system is certified or conditionally approved prior to its experimental use; or,
 - b) The voting system meets all of the following requirements:
 - i) Uses only software and firmware with disclosed source code, except for unmodified commercial off-the-shelf software and firmware;
 - ii) Meets the requirements set forth in the SOS's voting system standards and regulations governing the use of a voting system, as specified;
 - iii) Meets the requirements set forth in pilot program regulations adopted by the SOS pursuant to this bill; and,
 - iv) Implements risk-limiting audits.
- 18) Provides that a voting system that meets all of the requirements above does not need to be certified or conditionally approved prior to its experimental use in a pilot program if the number of voting system units deployed in the pilot program is limited to the number necessary to test and demonstrate the capabilities of the voting system in a limited number of precincts or locations, including a prudent number of reserve units to ensure that sufficient working units will be available to conduct the pilot program. Provides that in no event shall the number of voting system units exceed 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. Provides that the capabilities that may be taken into account in determining the number of voting system units include, but

are not limited to, all the following:

- a) The capability of the voting system to accommodate voting in all languages in which the jurisdiction is required to provide ballots, as required by state and federal laws;
 - b) The capability of the voting system to accommodate voting by persons with a broad range of physical and cognitive disabilities, as required by state and federal laws;
 - c) The current and projected number of voting-eligible individuals in the jurisdiction; and,
 - d) The geography and distribution of the population in the jurisdiction.
- 19) Requires a governing board, no later than nine months before the election at which the pilot program of a voting system is proposed to be conducted, to submit a plan for the pilot program to the SOS. Requires the SOS to approve or reject the plan no later than three months after receipt of the plan.
- 20) Requires votes cast on the voting system during the pilot program to be subject to risk limiting audits. Requires the jurisdiction conducting the pilot program, for each contest conducted entirely on the pilot voting system, to conduct risk-limiting audits with at least a 90 percent chance of requiring a full manual tally of the contest whenever a full manual tally would show an outcome that differs from the outcome reported by the pilot voting system. Requires the jurisdiction conducting the pilot program, for each contest partially on the pilot voting system, to conduct a partial risk-limiting audit of the portion of the contest in which the voters cast their votes on the pilot voting system, with at least 90 percent chance of requiring a full manual tally of all votes cast using the pilot voting system whenever the outcome is incorrect in part. Provides that if a risk-limiting audit of a contest leads to a full manual tally of all of the ballots cast in the contest, then the contest outcome according to that manual tally shall become the official result. Provides that if a partial risk-limiting audit of a contest leads to a full manual tally of the ballots cast using the pilot voting system, the vote counts according to that manual tally shall replace the vote counts reported by the pilot voting system for the purpose of determining the official contest results. Requires risk-limiting audit procedures to comply with all other requirements in regulations adopted by the SOS.
- 21) Requires the governing board, upon completion of the pilot program, to notify the SOS in writing of any defect, fault, or failure of the hardware, software, or firmware of the voting system or a part of the voting system. Prohibits a voting system pilot program from being conducted in a legally binding election without prior the approval of the SOS. Requires the SOS to adopt and publish regulations governing voting system pilot programs.
- 22) Defines "state-approved testing agency," for the purposes of this bill, to mean a person or entity that is authorized by the SOS to conduct the testing and examination of a voting system in connection with certification or conditional approval of the voting system pursuant to this bill.
- 23) Requires the SOS to do the following:

- a) Publish requirements for the approval of state-approved testing agencies that are authorized to conduct the testing and examination of voting systems. Provides that until requirements are published, federally accredited voting system laboratories shall be used to conduct testing and examination; and,
 - b) Approve and publish a list of authorized state-approved testing agencies.
- 24) Provides that a person, corporation, or public agency applying for certification of a voting system is responsible for all costs associated with the testing of the voting system.
- 25) Permits the SOS to contract with one or more expert technicians to assist with the certification of a voting system, including testing and examination of the voting system.
- 26) Deletes outdated intent language pertaining to voters with visual disabilities and instead provides that it is the intent of the Legislature that California voting system standards and elections comply with the provisions of the federal Help America Vote Act of 2002 (HAVA) that require voting systems be accessible for individuals with disabilities, including nonvisual accessibility for the blind and visually impaired, in a manner that provides the same opportunity for access and participation, including privacy and independence, as provided to other voters who are not disabled.
- 27) Authorizes Voting Modernization Fund monies to be used to purchase systems certified or conditionally approved by the SOS, instead of only systems certified by the SOS. Permits a county to use fund moneys to contract and pay for the following:
- a) Research and development of a new voting system that has not been certified or conditionally approved by the SOS and uses only nonproprietary software and firmware with disclosed source code, except for unmodified commercial off-the-shelf software and firmware, as defined;
 - b) Manufacture of the minimum number of voting system units reasonably necessary for either of the following purposes:
 - i) To test and seek certification of conditional approval for the voting system pursuant to the provisions of this bill; or,
 - ii) To test and demonstrate the capabilities of the voting system in a pilot program pursuant to this bill.
- 28) Makes technical and conforming changes for ballot marking systems.
- 29) Makes other technical and conforming changes.

EXISTING LAW:

- 1) Defines a "voting system" as any mechanical, electromechanical, or electronic system and its software, or any combination of these used to cast or tabulate votes, or both.

- 2) Requires the SOS to study and adopt regulations and specifications governing the use of voting machines, voting devices, vote tabulating devices, and ballot marking systems and any software used for each, including the programs and procedures for vote tabulating and testing. Requires the criteria for establishing the specifications and regulations to include, but not be limited to, the following:
 - a) Requires the machine or device, and its software, to be suitable for the purpose for which it is intended;
 - b) Requires the system to preserve the secrecy of the ballot; and,
 - c) Requires the system to be safe from fraud or manipulation.
- 3) Prohibits a voting system, in whole or in part, from being used unless it has received the approval of the SOS prior to any election at which it is to be first used.
- 4) Prohibits a jurisdiction from purchasing or contracting for a voting system, in whole or in part, unless it has received the approval of the SOS.
- 5) Permits a person or corporation owning or being interested in a voting system or a part of a voting system to apply to the SOS to examine it and report on its accuracy and efficiency to fulfill its purpose.

FISCAL EFFECT: Unknown

COMMENTS:

- 1) Purpose of the Bill: According to the author:

California has long been a leader in expanding voter access and participation as well as ensuring the transparency and integrity of elections.

Transparency of the voting process is important for the public's ability to verify and trust election outcomes. And this trust rests in the systems and machines we use to cast and count votes.

In California, voting systems are a patchwork of different technologies that are developed, leased and sold to 58 counties by half a dozen different vendors. Counties only partially own their systems which limits access and transparency of the hardware and software. Election equipment is subject to licensing agreements, which means counties must hire the vendor for repairs and maintenance.

Just as we can't repair our home computers without breaking the warranty, counties can't repair their own voting systems. Voting system vendors change ownership and can even go out of business leaving counties without election support. Vendors can also [have] conflicts of interest in an election their systems administer.

I have introduced SB 360 to ensure the public can own their vote and have full access to every part of their voting system. We trust election officials to conduct our elections, we should trust them to create and maintain our voting systems.

SB 360 will allow counties to develop and own voting systems that meet federal and state standards and are certified by the Secretary of State. SB 360 maintains current standards that voting systems:

- Produce an auditable paper trail.
- Allow access for voters with special needs.
- Require a full public review before certification a voting system.

One of the driving forces behind the public ownership of voting systems is the Los Angeles County Registrar-Recorder/County Clerk. L.A. County is the most populated and geographically expansive county in the U.S. and the most complex election jurisdiction in the nation.

The county has 10 million residents spread across 4,000 square miles and over 500 elected offices. The County is in the process of developing a voting system that meets their unique needs. The development of the system has been open, transparent, and included many political stakeholders, including political parties and election protection advocates.

- 2) United States Election Assistance Commission: In 2002, the EAC was established by HAVA to serve as an independent, bipartisan commission responsible for developing guidance to meet HAVA requirements, and to accredit testing laboratories and certify voting systems, as well as audit the use of HAVA funds. However, the EAC has been without a quorum of commissioners since 2011. In addition, there are three bills pending in the House of Representatives which eliminate the EAC altogether.

On November 19, 2012, United States Senator Barbara Boxer sent a letter to congressional leaders calling for the appointment of EAC Commissioners. Her letter states, "The EAC, which currently has no commissioners and no executive director, has not held a public meeting since 2011. Staff members have continued to perform the day-to-day functions of the EAC, but without Senate-confirmed leaders, the Commission can do nothing of importance." As a result, the EAC is currently unable to approve new voting systems in a timely manner.

- 3) Voting System Review Process: Current law requires a voting system and any modification to a voting system to be approved by the SOS before it can be used in any election. Additionally, electronic voting systems must be certified at the federal level by the EAC before they can be submitted to the SOS's office for review. When a voting system is brought to California for review, the SOS conducts a thorough examination and review of the proposed system that includes: a review of the application and documentation, end-to-end functional examination and testing, volume testing under election-like conditions of all voting devices used by the voter, security testing that includes a full source code review and penetration testing, accessibility examination and testing, a public hearing, and public comment period. The SOS's review process is designed to augment, not duplicate, the EAC review and approval process.

This bill, which removes the federal pre-certification or qualification requirement, makes a significant policy change to California's voting system review process. This bill allows a person, corporation or county owning or having interest in the sale or acquisition of a voting system to bypass federal review and approval and instead only seek certification or conditional approval from the SOS. Proponents argue that due to uncertainty about the operations of the EAC, it may be some time before the federal review and approval processes resume and new guidelines are adopted. Consequently, jurisdictions seeking to replace their voting system with a new system are stalled. Furthermore, voting system vendors may be reluctant to build new systems because there is uncertainty as to when new standards will be adopted. In addition, while the state testing process is designed to complement, not duplicate the EAC testing, proponents argue that California's testing, which includes penetration testing and volume testing, is more stringent and goes beyond federal testing.

Others argue that while the federal testing requirements may not be as robust as California's requirements, they do have value. According to Verified Voting's June 2013 report, "Changes Ahead: A Look at Voting System Testing and Certification," federal testing and certification programs enable states to know that a voting system with federal certification has met certain requirements before being submitted to state testing, acceptance and deployment. In addition, the EAC program requires that testing laboratories be inspected and meet certain conditions to be accredited and ensures transparency by posting online test plans and test result reports which is useful information for stakeholders interested in voting system technology.

In an effort to retain the federal testing and approval processes, this bill requires the SOS to adopt and publish voting system standards and regulations governing the use of voting systems that meet or exceed federal voluntary voting system guidelines set forth by the EAC or its successor. Furthermore, the bill requires the state to use the latest updated EAC guidelines until state standards are adopted.

- 4) Voting Modernization Bond Fund: In September 2001, AB 56 (Shelley), Chapter 902, Statutes of 2001, also known as the Voting Modernization Bond Act of 2002, provided \$200 million in state bond funds to help counties pay for new voting equipment and established a Voting Modernization Board to carry out this task. Governor Gray Davis signed the bill and AB 56 became Proposition 41 and was placed on the March 2002 ballot. Voters approved Proposition 41 with a 52 percent vote in favor of the measure. However, the text of Proposition 41 states that, "Fund money shall only be used to purchase systems certified by the Secretary of State" and that counties receiving funds must match "fund moneys at a ratio of one dollar of county moneys for every three dollars of fund moneys."

At the federal level, Congress passed and President George W. Bush signed HAVA. Among its provisions, HAVA provided federal matching grants to states to help pay for modernizing voting equipment.

In April 2003, California received \$265 million in HAVA funds; including \$75 million for new voting equipment and \$40 million for a new statewide voter database. These voting equipment funds were distributed to each county beginning in 2004. California counties were then authorized to purchase a new voting system. Nearly all California counties purchased their voting systems from five different vendors. The vendors offered a variety of

systems and upgrades resulting in a patchwork of technologies throughout California.

As mentioned above, current law only authorizes Voter Modernization Bond funds to be used to purchase voting systems certified by the SOS. This bill makes a significant change to policies that were approved by voters. The bill authorizes fund monies to be used to purchase voting systems that are conditionally approved by the SOS and allows a county to use fund monies to contract and pay for the research and development of a new nonproprietary voting system that uses disclosed source code and has not been certified or conditionally approved by the SOS. In addition, this bill permits a county to use public funds to manufacture a limited number of voting system units that are reasonably necessary to test and seek certification or conditional approval as well as test and demonstrate the capabilities of the voting system in a pilot program, as specified. These policy changes are significant departures from how fund monies have been used in the past.

Proponents of the bill argue that county voting systems in California are aging rapidly and the process for approving voting systems is doing little to help approve new innovative systems or spur new approaches to voting system development. This bill, which allows counties to use public funds to own, develop, and operate a voting system will ensure counties have the opportunity to be innovative and create systems that will meet the needs of their jurisdiction while being transparent and open to the public.

- 5) Los Angeles County Voting Systems Assessment Project (VSAP): Due to Los Angeles County's size, diversity, complexity, and the limited voting systems market, it is extremely challenging for Los Angeles to reasonably consider a commercial off-the-shelf voting system. Consequently, in 2009, the Los Angeles County Registrar-Recorder/County Clerk (RR/CC) launched the VSAP in response to the growing voting system needs and challenges faced by Los Angeles County. According to VSAP background documents, the vision of the VSAP is to identify and implement a new voting system in a transparent and participatory manner that takes into account the needs and expectations of current and future Los Angeles County voters.

VSAP background documents state that a VSAP Advisory Committee was established in response to a motion adopted by the Los Angeles County Board of Supervisors in September of 2010, establishing a more participatory approach to the acquisition and implementation of a new county voting system. The Committee provides a formal platform for continued citizen participation and transparency. The purpose of the Committee is to help analyze and comment on the project's initial research findings and to provide the RR/CC input and guidance for the establishment of principles and general requirements of a voting system and for the development of acquisition models the County intends to employ. The Committee is composed of a group of sixteen members representing experts, stakeholders, and community leaders from critical constituency groups and communities of interest, including voters with disabilities, language minority groups and ethnic minorities. Also represented are critical stakeholders such as local election officials, political parties, and academic institutions.

The VSAP is noteworthy because it is attempting to first define the kind of voting system it wants and then to be directly involved in the system's development. The VSAP process that the RR/CC is proceeding with could make Los Angeles the first county in the United States to develop, operate, and own its voting system.

- 6) New Voting System Pilot Program: Current law permits a governing board to provide for the experimental use of a voting system at an election in one more precincts. This allows a county the ability to test the fit of a certified voting system before committing to the full purchase of such a system. This bill expands on that premise and establishes a pilot program which allows a governing board, without formally adopting a voting system, the experimental use of a voting system in a pilot program held in one or more precincts at a single election, as specified. To ensure the security and integrity of the pilot program, the bill sets up two paths by which the pilot program may work. First, a jurisdiction may use a voting system that is certified or conditionally approved prior to its experimental use. The second option allows a jurisdiction to use a voting system that is not certified or conditionally approved if certain requirements are met. For example, the bill requires the system to use only software and firmware with disclosed source code, as specified. In addition, the bill requires the system to meet all the SOS's voting system guidelines and regulations, including federal guidelines, to implement risk limiting audits, as defined, and limit the number of units used in the pilot to the number necessary to test and demonstrate the capabilities of the voting system in a limited number of precincts or locations, as specified. Furthermore, the bill requires the governing board to submit a plan of the pilot program to the SOS for approval. These strict requirements will ensure the integrity and transparency of the pilot program.

The limited scope of any pilot programs will not only ensure the integrity and transparency of such pilot programs, but it will also provide some much needed flexibility and innovation into voting system development.

- 7) Arguments in Support: VerifiedVoting.org writes in support:

Thirty-five states involve federal testing and /or standards at some level. Federal standards can thus set a floor to which most states have a relationship, even if those states do not require federal certification. California supplements federal standards testing with state testing that actually exceeds much of what is done in other states around the country. We examine source code for security purposes, and we conduct penetration testing to identify security vulnerabilities. We also do volume testing under election-like conditions to ensure systems perform in real-world conditions. And we go beyond the current federal requirements to test for voting system accessibility.

In that respect, we already lead in this arena, but we are stymied by the fact that our standards for testing no longer can be improved because the federal agency that approves those standards lacks the necessary quorum to do so. This means states like California become increasingly limited in the choices available to them in the current voting system marketplace, and vendors, uncertain about whether or when a new iteration of the standards will be adopted, do not know what to design to.

If we can establish our own standards, and govern the testing process for ourselves, we can enable better systems as we move forward. With our own standards, California can lead the shift to requiring common data format in voting system design: a real game-changer for better systems in future, improving post-election auditing and statistical analysis of elections, as well as enabling component-based systems that are more flexible and less costly.

REGISTERED SUPPORT / OPPOSITION:

Support

Los Angeles County Board of Supervisors (Sponsor)
California Association of Clerks and Election Officials
California Common Cause
California Forward Action Fund
California State Association of Counties
California State Council of the Service Employees International Union
National Association of Latino Elected and Appointed Officials Educational Fund
PowerPAC.org
Secretary of State Debra Bowen
VerifiedVoting.Org

Opposition

Santa Monica Democratic Club

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