# First Regular Session Seventy-fifth General Assembly STATE OF COLORADO

## **INTRODUCED**

LLS NO. 25-0812.02 Pierce Lively x2059

**HOUSE BILL 25-1193** 

### **HOUSE SPONSORSHIP**

Suckla,

### SENATE SPONSORSHIP

(None),

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# House Committees

#### **Senate Committees**

State, Civic, Military, & Veterans Affairs

### A BILL FOR AN ACT

CONCERNING THE CREATION OF THE "VOTE TRANSPARENCY PROTOCOL ACT".

## **Bill Summary**

(Note: This summary applies to this bill as introduced and does not reflect any amendments that may be subsequently adopted. If this bill passes third reading in the house of introduction, a bill summary that applies to the reengrossed version of this bill will be available at <a href="http://leg.colorado.gov">http://leg.colorado.gov</a>.)

The bill creates new processes for vote verification, voter verification, and audit transparency.

For vote verification, the bill requires ballots to be assigned vote tracking numbers and voters to be assigned voter identifier numbers. Voters are given both of these numbers and the secretary of state (secretary) publishes these numbers on a publicly accessible vetting

transparency ledger and a publicly accessible ballot transparency ledger, respectively. The number of vote tracking numbers on the vetting transparency ledger must equal the number of voter identifier numbers on the ballot transparency ledger. After a ballot is cast, the secretary publishes the information on the ballot on a cast vote transparency ledger along with the corresponding vote tracking number. A voter may challenge the entry on the cast vote transparency ledger associated with their vote tracking number. The secretary shall maintain a challenged vote ledger and shall publish the status to challenges of entries on the cast vote transparency ledger on the challenged vote ledger.

For voter verification, the bill requires voters to provide the secretary with the following no less than one month before an election in order to receive a mail ballot for that election:

- The voter's mailing address;
- A copy of the voter's relevant identification;
- Verification that the voter satisfies the necessary qualifications to register as a voter;
- A request to receive a mail ballot;
- Acknowledgment of the penalties for committing fraud in connection with casting a vote; and
- Verification that the voter is a human.

A voter can provide this information either on the secretary's website or in connection with the payment of a utility bill. Further, the bill:

- Prohibits the distribution of mail ballots more than 2 weeks before the relevant election;
- Requires the secretary, within 30 days after the effective date of the bill, to withdraw the state from participation in the electronic registration information system; and
- Requires the secretary to annually remove all registration information from the the statewide voter registration system and for that removal to be verified by an entity that is not a state agency.

For audit transparency, the bill requires the secretary to generate for every election a number of randomly generated and assigned audit numbers (RAANs) equal to the amount of electors who voted in the previous election plus one percent. The secretary shall enter each RAAN it generates into a RAAN tracking database. The secretary must randomly assign and attach each RAAN to a ballot. After a ballot is cast:

- A voter may keep a copy of the RAAN associated with their ballot;
- The secretary shall enter the first 12 digits of a ballot's RAAN (partial RAAN) in the RAAN tracking database to ensure that the ballot's RAAN was one of the RAANs that the secretary generated for the election;
- The secretary shall scan the ballot; and

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• The secretary shall enter the ballot's partial RAAN, along with the votes cast with that ballot, in a downloadable, searchable, and publicly accessible cast vote record database.

After inputting information for a ballot into the cast vote record database, the secretary shall verify that information against the scan of the ballot. An individual can challenge the information in the cast vote record database associated with a partial RAAN by presenting the complete RAAN to the secretary.

1 Be it enacted by the General Assembly of the State of Colorado: 2 **SECTION 1.** In Colorado Revised Statutes, **add** part 11 to article 3 7 of title 1 as follows: 4 **PART 11** 5 VOTE TRANSPARENCY PROTOCOL 6 1-7-1101. Short title. THE SHORT TITLE OF THIS PART 11 IS THE 7 "VOTE TRANSPARENCY PROTOCOL ACT". 8 1-7-1102. **Definitions.** AS USED IN THIS PART 11, UNLESS THE 9 CONTEXT OTHERWISE REQUIRES: 10 (1) "DISTRIBUTED LEDGER" MEANS A PERMANENT DATABASE THAT 11 IS CONSENSUALLY SHARED AND SYNCHRONIZED ACROSS MULTIPLE 12 LOCATIONS. EACH RECORD IN A DISTRIBUTED LEDGER MUST BE ATTACHED 13 TO THE IMMEDIATELY PRECEDING RECORD BY WAY OF A ONE-WAY HASH 14 FUNCTION EXPRESSED AS A PREVIOUS HASH. THE GENERAL ASSEMBLY 15 SHALL ENSURE THAT ALL DISTRIBUTED LEDGERS ARE EASILY SEARCHABLE, 16 ACCURATE, AND SECURE. 17 "ONE-WAY HASH FUNCTION" MEANS A MATHEMATICAL 18 FUNCTION THAT TAKES A VARIABLE-LENGTH INPUT STRING AND CONVERTS 19 IT INTO A FIXED-LENGTH TEXT SEQUENCE THAT IS COMPUTATIONALLY 20 DIFFICULT TO INVERT. AT A MINIMUM, THE ONE-WAY HASH FUNCTION

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1	MUST BE A SECURE HASH ALGORITHM TWO HUNDRED FIFTY-SIX ONE-WAY
2	CRYPTOGRAPHIC HASH FUNCTION.
3	(3) "PREVIOUS HASH" MEANS A UNIQUE HASH GENERATED BY THE
4	ONE-WAY HASH FUNCTION FOR A DISTRIBUTED LEDGER.
5	1-7-1103. Vote transparency protocol applicability and
6	implementation - rules. (1) NOTWITHSTANDING ANY LAW TO THE
7	CONTRARY, THIS PART 11 APPLIES IN ALL ELECTIONS AND SUPERSEDES ANY
8	CONFLICTING PROVISION OF THIS TITLE 1 OR ANY OTHER LAW THAT
9	GOVERNS THE CONDUCT OF ELECTIONS TO WHICH THIS PART 11 APPLIES.
10	(2) THE SECRETARY OF STATE MAY ADOPT RULES AS NECESSARY
11	TO IMPLEMENT THIS PART 11.
12	1-7-1104. Vote verification - definitions. (1) (a) EACH ELECTOR
13	WHO CASTS A VOTE IN AN ELECTION MUST BE ASSIGNED AND PROVIDED A
14	VOTER IDENTIFIER NUMBER.
15	(b) EACH BALLOT CAST IN AN ELECTION MUST BE ASSIGNED A VOTE
16	TRACKING NUMBER, AND THE ELECTOR WHO CAST THAT BALLOT MUST BE
17	PROVIDED WITH THAT VOTE TRACKING NUMBER.
18	(2) (a) For each election, the secretary of state shall
19	CREATE A BALLOT TRANSPARENCY LEDGER, CAST VOTE TRANSPARENCY
20	LEDGER, AND VETTING TRANSPARENCY LEDGER.
21	(b) THE SECRETARY OF STATE SHALL ENSURE THAT THE TOTAL
22	NUMBER OF VOTER IDENTIFIER NUMBERS IN THE BALLOT TRANSPARENCY
23	LEDGER IS EQUAL TO THE TOTAL NUMBER OF VOTE TRACKING NUMBERS IN
24	THE VETTING TRANSPARENCY LEDGER.
25	(3) IF, UPON REVIEWING THE CAST VOTE TRANSPARENCY LEDGER,
26	AN ELIGIBLE ELECTOR WHO CAST A VOTE IN AN ELECTION THAT HAS NOT
27	VET HAD ITS RESULT CERTIFIED BELIEVES THAT THEIR VOTE WAS

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1	IMPROPERLY RECORDED, THAT ELECTOR MAY PRESENT THEIR VOTE
2	TRACKING NUMBER AND VOTER IDENTIFIER NUMBER TO THE SECRETARY
3	OF STATE AND REQUEST REVIEW AND CORRECTION OF THEIR VOTE. THE
4	SECRETARY OF STATE SHALL RESOLVE A REQUEST MADE PURSUANT TO
5	THIS SUBSECTION (3) AS QUICKLY AND TRANSPARENTLY AS POSSIBLE.
6	(4) AS USED IN THIS SECTION, UNLESS THE CONTEXT OTHERWISE
7	REQUIRES:
8	(a) "BALLOT TRANSPARENCY LEDGER" MEANS A PUBLICLY
9	AVAILABLE DISTRIBUTED LEDGER THAT CONSISTS OF THE VOTER
10	IDENTIFIER NUMBERS FOR ELECTORS WHO CAST A VOTE IN AN ELECTION.
11	(b) "Cast vote transparency ledger" means a publicly
12	AVAILABLE DISTRIBUTED LEDGER THAT CONSISTS OF THE FOLLOWING FOR
13	EACH BALLOT CAST IN AN ELECTION:
14	(I) THE VOTE TRACKING NUMBER; AND
15	(II) THE INFORMATION CONTAINED WITHIN THE BALLOT.
16	(c) "VETTING TRANSPARENCY LEDGER" MEANS A PUBLICLY
17	AVAILABLE DISTRIBUTED LEDGER THAT CONSISTS OF THE VOTE TRACKING
18	NUMBERS FOR BALLOTS CAST IN AN ELECTION.
19	(d) "VOTER IDENTIFIER NUMBER" MEANS A UNIQUE, ANONYMOUS
20	TEXT IDENTIFIER ASSIGNED TO AN ELECTOR WHO CASTS A BALLOT.
21	(e) "VOTE TRACKING NUMBER" MEANS A UNIQUE, ANONYMOUS
22	TEXT IDENTIFIER ASSIGNED TO A BALLOT.
23	1-7-1105. Voter verification. (1) IN ORDER TO RECEIVE A MAIL
24	BALLOT PACKET, AS DEFINED IN SECTION 1-7.5-103, FOR AN ELECTION, NO
25	EARLIER THAN ONE MONTH BEFORE THAT ELECTION, AN ELECTOR MUST
26	PROVIDE THE FOLLOWING TO THE SECRETARY OF STATE:
27	(a) THE ELECTOR'S MAILING ADDRESS;

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1	(b) A COPY OF THE VOTER'S IDENTIFICATION AS DEFINED IN
2	SECTION 1-1-104 (19.5);
3	(c) VERIFICATION THAT THE VOTER SATISFIES THE NECESSARY
4	QUALIFICATIONS TO REGISTER AS A VOTER PURSUANT TO SECTION 1-2-101;
5	(d) A REQUEST TO RECEIVE A MAIL BALLOT;
6	(e) AN ACKNOWLEDGMENT OF THE PENALTIES FOR COMMITTING
7	FRAUD IN CONNECTION WITH CASTING A VOTE; AND
8	(f) If providing the information described in this
9	SUBSECTION (1) ON THE SECRETARY OF STATE'S WEBSITE, EVIDENCE THAT
10	THE ELECTOR IS A HUMAN THROUGH THE COMPLETION OF A "COMPLETELY
11	AUTOMATED PUBLIC TURING TEST TO TELL COMPUTERS AND HUMANS
12	APART".
13	(2) THE SECRETARY OF STATE SHALL ENSURE THAN AN ELECTOR
14	MAY PROVIDE THE SECRETARY OF STATE WITH THE INFORMATION
15	DESCRIBED IN SUBSECTION (1) OF THIS SECTION ON THE SECRETARY OF
16	STATE'S WEBSITE OR IN CONNECTION WITH THE PAYMENT OF AN
17	ELECTRICITY, GAS, OR WATER BILL.
18	(3) Mail Ballot Packets, as defined in Section 1-7.5-103,
19	SHALL NOT BE DISTRIBUTED FOR AN ELECTION MORE THAN TWO WEEKS
20	BEFORE THE DATE OF THAT ELECTION.
21	(4) THE SECRETARY OF STATE SHALL, WITHIN THIRTY DAYS AFTER
22	THE EFFECTIVE DATE OF THIS SECTION, WITHDRAW THE STATE FROM
23	PARTICIPATION IN THE ELECTRONIC REGISTRATION INFORMATION CENTER.
24	(5) (a) The secretary of state shall annually remove all
25	REGISTRATION INFORMATION FROM THE STATEWIDE VOTER REGISTRATION
26	SYSTEM CREATED IN SECTION 1-2-301.
27	(b) THE SECRETARY OF STATE SHALL ENSURE THAT AN ENTITY

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1	THAT IS NOT A STATE AGENCY ANNUALLY VERIFIES THAT THE SECRETARY
2	OF STATE HAS COMPLIED WITH SUBSECTION (5)(a) OF THIS SECTION.
3	1-7-1106. Audit transparency - definitions. (1) (a) BEFORE
4	EVERY ELECTION, THE SECRETARY OF STATE SHALL GENERATE A NUMBER
5	OF RANDOMLY GENERATED AND ASSIGNED AUDIT NUMBERS EQUAL TO ONE
6	HUNDRED ONE PERCENT OF THE NUMBER OF VOTES CAST THE LAST TIME A
7	SIMILAR ELECTION WAS HELD.
8	(b) The secretary of state shall enter each randomly
9	GENERATED AND ASSIGNED AUDIT NUMBER IT CREATES FOR AN ELECTION
10	IN A RANDOMLY GENERATED AND ASSIGNED AUDIT NUMBER DATABASE
11	FOR THAT ELECTION.
12	(c) FOR EACH BALLOT IN AN ELECTION, THE SECRETARY OF STATE
13	SHALL RANDOMLY ASSIGN A RANDOMLY GENERATED AND ASSIGNED AUDIT
14	NUMBER AND ATTACH THE RANDOMLY GENERATED AND ASSIGNED AUDIT
15	NUMBER.
16	(2) AFTER A BALLOT IS CAST:
17	(a) A VOTER MAY CHOSE TO KEEP A COPY OF THE RANDOMLY
18	GENERATED AND ASSIGNED AUDIT NUMBER ASSIGNED TO THE VOTER'S
19	BALLOT; AND
20	(b) THE SECRETARY OF STATE SHALL:
21	(I) ENTER THE PARTIAL RANDOMLY GENERATED AND ASSIGNED
22	AUDIT NUMBER FOR THE BALLOT IN THE RANDOMLY GENERATED AND
23	ASSIGNED AUDIT NUMBER DATABASE IT CREATED FOR THAT ELECTION TO
24	ENSURE THAT THE PARTIAL RANDOMLY GENERATED AND ASSIGNED AUDIT
25	NUMBER CORRESPONDS WITH A RANDOMLY GENERATED AND ASSIGNED
26	AUDIT NUMBER THAT THE SECRETARY OF STATE GENERATED FOR THAT
2.7	ELECTION:

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1	(II) SCAN THE BALLOT; AND
2	(III) ENTER THE BALLOT'S PARTIAL RANDOMLY GENERATED AND
3	ASSIGNED AUDIT NUMBER AND THE INFORMATION WITHIN THE BALLOT IN
4	A CAST VOTE RECORD DATABASE FOR THE ELECTION.
5	(3) The secretary of state shall verify the ballot scan
6	CREATED PURSUANT TO SUBSECTION (2)(b)(II) OF THIS SECTION
7	CORRESPONDS WITH THE INFORMATION THAT THE SECRETARY OF STATE
8	ENTERS IN THE CAST VOTE RECORD DATABASE PURSUANT TO SUBSECTION
9	(2)(b)(III) OF THIS SECTION.
10	(4) (a) The secretary of state shall create an efficient
11	AND TRANSPARENT PROCESS THROUGH WHICH AN INDIVIDUAL MAY
12	PRESENT A RANDOMLY GENERATED AND ASSIGNED AUDIT NUMBER AND
13	CHALLENGE THE INFORMATION ASSOCIATED WITH THE CORRESPONDING
14	PARTIAL RANDOMLY GENERATED AND ASSIGNED AUDIT NUMBER IN THE
15	CAST VOTE RECORD DATABASE.
16	(b) The secretary of state may charge an individual a
17	MAXIMUM OF TWENTY DOLLARS IN CONNECTION WITH THE INITIATING OF
18	A CHALLENGE PURSUANT TO SUBSECTION (4)(a) OF THIS SECTION, BUT THE
19	SECRETARY OF STATE SHALL REFUND ANY SUCH CHARGED AMOUNT IF THE
20	CHALLENGE IS SUCCESSFUL.
21	(5) AS USED IN THIS SECTION, UNLESS THE CONTEXT OTHERWISE
22	REQUIRES:
23	(a) "CAST VOTE RECORD DATABASE" MEANS A PUBLICALLY
24	AVAILABLE DISTRIBUTED LEDGER THAT FOR EACH BALLOT CAST IN AN
25	ELECTION CONTAINS THE FOLLOWING:
26	(I) THE PARTIAL RANDOMLY GENERATED AND ASSIGNED AUDIT
27	NUMBER ASSOCIATED WITH THE BALLOT; AND

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1	(II) THE INFORMATION WITHIN THE BALLOT.
2	(b) "PARTIAL RANDOMLY GENERATED AND ASSIGNED AUDIT
3	NUMBER" MEANS THE FIRST TWELVE CHARACTERS OF A RANDOMLY
4	GENERATED AND ASSIGNED AUDIT NUMBER.
5	(c) "RANDOMLY GENERATED AND ASSIGNED AUDIT NUMBER"
6	MEANS A STRING OF THIRTY-TWO RANDOMLY GENERATED ALPHA-NUMERIC
7	CHARACTERS.
8	(d) "RANDOMLY GENERATED AND ASSIGNED AUDIT NUMBER
9	TRACKING DATABASE" MEANS A DISTRIBUTED LEDGER THAT INCLUDES THE
10	FOLLOWING:
11	(I) EACH RANDOMLY GENERATED AND ASSIGNED AUDIT NUMBER
12	GENERATED BY THE SECRETARY OF STATE FOR THE RELEVANT ELECTION;
13	(II) THE PARTIAL RANDOMLY GENERATED AND ASSIGNED AUDIT
14	NUMBER THAT CORRESPONDS TO EACH RANDOMLY GENERATED AND
15	ASSIGNED AUDIT NUMBER GENERATED BY THE SECRETARY OF STATE FOR
16	THE RELEVANT ELECTION; AND
17	(III) WHETHER THE BALLOT ASSOCIATED WITH A RANDOMLY
18	GENERATED AND ASSIGNED AUDIT NUMBER WAS CAST IN THE RELEVANT
19	ELECTION.
20	SECTION 2. Act subject to petition - effective date. This act
21	takes effect at 12:01 a.m. on the day following the expiration of the
22	ninety-day period after final adjournment of the general assembly; except
23	that, if a referendum petition is filed pursuant to section 1 (3) of article V
24	of the state constitution against this act or an item, section, or part of this
25	act within such period, then the act, item, section, or part will not take
26	effect unless approved by the people at the general election to be held in

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- 1 November 2026 and, in such case, will take effect on the date of the
- 2 official declaration of the vote thereon by the governor.