

Second Regular Session
Seventy-fourth General Assembly
STATE OF COLORADO

INTRODUCED

LLS NO. 24-0930.01 Pierce Lively x2059

HOUSE BILL 24-1279

HOUSE SPONSORSHIP

DeGraaf,

SENATE SPONSORSHIP

(None),

House Committees

State, Civic, Military, & Veterans Affairs

Senate Committees

A BILL FOR AN ACT

101 CONCERNING THE USE OF VOTE TRACKING NUMBERS IN ELECTIONS,
102 AND, IN CONNECTION THEREWITH, ESTABLISHING
103 REQUIREMENTS FOR THE CREATION AND USE OF A DISTRIBUTED
104 LEDGER, CAST VOTE RECORD, TALLY STATUS REPORT, VOTE
105 TRACKING NUMBER ASSIGNMENT, AND VOTER ELIGIBILITY
106 STATUS DISTRIBUTED LEDGERS.

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 <http://leg.colorado.gov>.)

A distributed ledger is a permanent database that is consensually

Shading denotes HOUSE amendment. Double underlining denotes SENATE amendment.
Capital letters or bold & italic numbers indicate new material to be added to existing law.
Dashes through the words or numbers indicate deletions from existing law.

shared, synchronized, and publicly accessible. A distributed ledger allows information to be entered into a publicly available common database from multiple locations at different times. The bill establishes a system for the use of distributed ledgers in elections.

In the case of an elector who votes in person:

- A vetting registrar, in the presence of a vetting registration observer team, verifies that the elector is eligible to vote and updates the voter eligibility status distributed ledger to reflect this process;
- A token assignment registrar, in the presence of a token assignment observer team, assigns the elector a vote tracking number, which is a unique, randomly assigned, anonymous, text identifier, and updates the token assignment status which causes the vetting registrar to update the voter eligibility status distributed ledgers to reflect the assignment. This vote tracking number is part of the ballot.
- The elector completes the elector's ballot and the vote tracking number is attached to that ballot whether beforehand or at that time; and
- An election official ensures that the elector is provided with a copy of the elector's ballot and the elector's vote tracking number.

In the case of an elector who votes by mail:

- A vetting registrar, in the presence of a vetting registration observer team, notifies the elector that the elector's ballot which contains a unique, randomly assigned, anonymous vote tracking number has been received and will only be counted after the elector acknowledges the ballot's receipt;
- If the elector confirms the receipt of the elector's ballot with the vetting registrar, in the presence of the vetting registration observer team, the vetting registrar shall indicate this confirmation on a voter eligibility form attached to the ballot and update the voter eligibility status distributed ledger to reflect the confirmation; and
- A token assignment registrar, in the presence of a token assignment observer team, assigns the ballot a vote tracking number, and updates the token assignment status, which causes the vetting registrar to update the voter eligibility status distributed ledgers to reflect the assignment.

Before any ballot is counted, it is verified, in the presence of a token assignment observer team, that a unique vote tracking number is attached to the ballot. Upon counting a ballot, unless the ballot is counted as part of a manual count, a cast vote record of the ballot including the vote tracking number must be created and entered into the cast vote

1 PARTICIPATION.

2 (2) THE GENERAL ASSEMBLY FURTHER FINDS AND DECLARES THAT:

3 (a) EACH AND EVERY DAY, AMERICANS TRUST ELECTRONIC
4 TRANSACTIONS THAT ARE DONE THROUGH THEIR BANKS, CREDIT CARDS,
5 AND ONLINE SHOPPING ACCOUNTS. THE ABILITY TO SEE THESE
6 TRANSACTIONS THROUGH BANK STATEMENTS, CREDIT CARD STATEMENTS,
7 AND ONLINE ACCOUNTS AIDS CONSUMER CONFIDENCE IN THESE
8 TRANSACTIONS. THESE STATEMENTS ARE A LEDGER, INCLUDING THE DATE
9 AND METHOD, OF EACH CUSTOMER TRANSACTION. CUSTOMERS ARE ALSO
10 GIVEN RECEIPTS FOR EACH TRANSACTION TO ALLOW THEM TO VERIFY THAT
11 THEIR TRANSACTION WAS PROCESSED CORRECTLY OR TO CHALLENGE A
12 TRANSACTION.

13 (b) METHODS THAT INCREASE CONSUMER CONFIDENCE IN
14 CONDUCTING TRANSACTIONS OVER ELECTRONIC PLATFORMS CAN ALSO BE
15 APPLIED TO VOTING SYSTEMS BY USING DISTRIBUTED LEDGERS IN
16 ELECTIONS, WHEREIN EACH BALLOT IS MARKED WITH A UNIQUE
17 IDENTIFYING VOTE TRACKING NUMBER, EACH VOTER IS GIVEN A RECEIPT
18 WHICH IS A COPY OF THE VOTER'S COMPLETED BALLOT WITH THAT UNIQUE
19 NUMBER, AND THE ELECTION RESULTS ARE PUBLISHED TO A DISTRIBUTED
20 PUBLIC VOTE LEDGER AS SOON AS THEY ARE RECEIVED, WHICH ALLOWS A
21 VOTER TO KNOW THAT EVERYONE IS LOOKING AT THE SAME LEDGER AND
22 THAT THEIR VOTE ON THAT LEDGER IS ACCURATE, WITH THE OPTION TO
23 CHALLENGE IT IF NOT;

24 (c) VOTER IDENTITY IS NOT IN ANY WAY ASSOCIATED WITH A VOTE
25 TRACKING NUMBER;

26 (d) VOTE TRACKING NUMBER VOTING IS FLEXIBLE AND SUPPORTS
27 THE MODIFICATION OF EXISTING SYSTEMS AND THE INTRODUCTION OF NEW

1 ELECTRONIC SYSTEMS;

2 (e) VOTE TRACKING NUMBER VOTING ALLOWS EVERY INDIVIDUAL
3 TO COUNT THE VOTE. BY LOOKING AT THE SAME RESULTS SEEN BY EVERY
4 OTHER VOTER, AN INDIVIDUAL CAN KNOW THAT THEIR VOTE WAS
5 RECORDED ACCURATELY AND THAT EVERY OTHER VOTER CAN VERIFY
6 THEIR OWN VOTE. THIS ALLOWS CONFIDENCE IN FINAL VOTE COUNTS TO BE
7 REACHED THROUGH CONSENSUS, RATHER THAN THROUGH A RELIANCE ON
8 SECRECY.

9 (f) VOTE TRACKING NUMBER VOTING ALLOWS UNPRECEDENTED
10 AUDIT FIDELITY. INSTEAD OF AUDITING THE PROCESS UTILIZING BATCH
11 AUDITS, OR POTENTIALLY STATISTICALLY INVALID "LIMITED RISK AUDITS",
12 VOTE TRACKING NUMBER VOTING ALLOWS AN AUDIT OF ONLY THE ACTUAL
13 RESULTS BY ANYONE AND EVERYONE. VOTE TRACKING NUMBER BALLOTS
14 CAN BE AUDITED BY THE INDIVIDUAL BALLOT TO YIELD THE HIGHEST
15 RESOLUTION POSSIBLE, EVEN BEFORE INDIVIDUAL VOTERS RECEIVE A
16 VERIFICATION OF THEIR OWN VOTE. NETWORK SECURITY AUDITS, MACHINE
17 VULNERABILITY TESTS, AND SYSTEMS COMPLIANCE TESTS, WHICH ARE
18 EXPENSIVE AND INEFFECTIVE, BECOME IRRELEVANT WHEN EACH VOTER
19 CAN VALIDATE THEIR VOTE AND CAN HAVE CONFIDENCE THAT ALL OTHER
20 VOTERS CAN DO THE SAME. IN COLORADO, THE REMOVAL OF THESE NOW
21 UNNECESSARY MACHINE-ORIENTED AUDIT REQUIREMENTS.

22 **1-7-1103. Definitions.** AS USED IN THIS PART 11, UNLESS THE
23 CONTEXT OTHERWISE REQUIRES:

24 (1) "CAST VOTE RECORD" MEANS A RECORD OF THE FOLLOWING
25 FOR EACH BALLOT:

26 (a) A UNIQUE IDENTIFIER FOR THE CAST VOTE RECORD FOR THE
27 BALLOT;

- 1 (b) A DESCRIPTION OF THE BALLOT TYPE;
- 2 (c) THE VOTE TRACKING NUMBER ASSOCIATED WITH THE BALLOT
3 OR THE ELECTOR WHO CAST THE BALLOT;
- 4 (d) THE NAMES OF THE TOKEN ASSIGNMENT REGISTRAR AND
5 VETTING REGISTRAR ASSOCIATED WITH THE VOTE TRACKING NUMBER;
- 6 (e) THE GLOBAL POSITIONING SYSTEM LOCATION, ADDRESS, OR
7 PRECINCT WHERE THE BALLOT WAS COUNTED;
- 8 (f) WHEN THE BALLOT WAS COUNTED, EXPRESSED IN
9 COORDINATED UNIVERSAL TIME;
- 10 (g) THE CHOICE FOR EACH OFFICE, BALLOT ISSUE, OR BALLOT
11 QUESTION THAT IS INDICATED ON THE BALLOT AND AN INDICATION OF ANY
12 OFFICE, BALLOT ISSUE, OR BALLOT QUESTION FOR WHICH AN ELECTOR DID
13 NOT MAKE A SELECTION; AND
- 14 (h) A PREVIOUS HASH.
- 15 (2) "CAST VOTE RECORD DISTRIBUTED LEDGER" MEANS A
16 DISTRIBUTED LEDGER THAT CONSISTS OF CAST VOTE RECORDS.
- 17 (3) "DISTRIBUTED LEDGER" MEANS A PERMANENT DATABASE THAT
18 IS CONSENSUALLY SHARED AND SYNCHRONIZED ACROSS MULTIPLE
19 LOCATIONS AND IS PUBLICLY ACCESSIBLE. EACH RECORD IN A
20 DISTRIBUTED LEDGER MUST BE ATTACHED TO THE IMMEDIATELY
21 PRECEDING RECORD BY WAY OF A ONE-WAY HASH FUNCTION EXPRESSED
22 AS A PREVIOUS HASH. THE GENERAL ASSEMBLY SHALL ENSURE THAT ALL
23 DISTRIBUTED LEDGERS ARE PUBLICLY AVAILABLE, EASILY SEARCHABLE,
24 ACCURATE, AND SECURE.
- 25 (4) "ONE-WAY HASH FUNCTION" MEANS A MATHEMATICAL
26 FUNCTION THAT TAKES A VARIABLE-LENGTH INPUT STRING AND CONVERTS
27 IT INTO A FIXED-LENGTH TEXT SEQUENCE THAT IS COMPUTATIONALLY

1 DIFFICULT TO INVERT. AT A MINIMUM, THE ONE-WAY HASH FUNCTION
2 MUST BE A SECURE HASH ALGORITHM TWO HUNDRED FIFTY-SIX ONE-WAY
3 CRYPTOGRAPHIC HASH FUNCTION.

4 (5) "PREVIOUS HASH" MEANS A UNIQUE HASH GENERATED BY THE
5 ONE-WAY HASH FUNCTION FOR A DISTRIBUTED LEDGER.

6 (6) "TALLY STATUS REPORT DISTRIBUTED LEDGER" MEANS A
7 DISTRIBUTED LEDGER FOR EACH OFFICE, BALLOT ISSUE, OR BALLOT
8 QUESTION THAT IS ON THE BALLOT AND THAT IS UPDATED AS VOTES ARE
9 COUNTED DURING AN ELECTION WITH ENTRIES THAT INCLUDE:

10 (a) WHEN THE ENTRY IS UPDATED, EXPRESSED IN COORDINATED
11 UNIVERSAL TIME;

12 (b) THE MOST CURRENT VOTE COUNTS FOR THE RELEVANT OFFICE,
13 BALLOT ISSUE, OR BALLOT QUESTION WHEN THE ENTRY IS UPDATED; AND

14 (c) A PREVIOUS HASH.

15 (7) "TOKEN ASSIGNMENT OBSERVER TEAM" MEANS AT LEAST TWO
16 INDIVIDUALS, ONE OF WHOM IS AFFILIATED WITH THE STATE'S LARGEST
17 POLITICAL PARTY AND ONE OF WHOM IS AFFILIATED WITH THE STATE'S
18 SECOND LARGEST POLITICAL PARTY, WHO SHALL ENSURE THAT ELECTORS
19 AND TOKEN ASSIGNMENT REGISTRARS COMPLY WITH THE REQUIREMENTS
20 OF THIS PART 11.

21 (8) "TOKEN ASSIGNMENT REGISTRAR" MEANS AN INDIVIDUAL WHO
22 PERFORMS THE DUTIES ENUMERATED IN SECTIONS 1-7-1104 AND 1-7-1105
23 WHILE BEING OBSERVED BY A TOKEN ASSIGNMENT OBSERVER TEAM. A
24 TOKEN ASSIGNMENT REGISTRAR MAY BE AN ELECTION OFFICIAL.

25 (9) "TOKEN ASSIGNMENT STATUS DISTRIBUTED LEDGER" MEANS A
26 DISTRIBUTED LEDGER THAT INCLUDES AN ENTRY WITH THE FOLLOWING
27 FOR EACH VOTE TRACKING NUMBER:

- 1 (a) A UNIQUE IDENTIFIER FOR THE ENTRY;
- 2 (b) THE VOTE TRACKING NUMBER;
- 3 (c) THE NAME OF THE TOKEN ASSIGNMENT REGISTRAR WHO ISSUED
- 4 THE ELECTION TOKEN;
- 5 (d) THE GLOBAL POSITIONING SYSTEM LOCATION, ADDRESS, OR
- 6 PRECINCT WHERE THE TOKEN ASSIGNMENT REGISTRAR ISSUED THE VOTE
- 7 TRACKING NUMBER;
- 8 (e) A PREVIOUS HASH; AND
- 9 (f) FOR ELECTRONIC BALLOTS, A SECURE PERSONAL
- 10 IDENTIFICATION NUMBER.

11 (10) "UNIQUE VOTER IDENTIFIER" MEANS THE UNIQUE IDENTIFIER

12 ASSIGNED TO EACH LEGALLY REGISTERED VOTER PURSUANT TO SECTION

13 1-2-301 (1).

14 (11) "VETTING REGISTRAR" MEANS AN INDIVIDUAL WHO PERFORMS

15 THE DUTIES ENUMERATED IN SECTIONS 1-7-1104 AND 1-7-1105 WHILE

16 BEING OBSERVED BY A VETTING REGISTRATION OBSERVER TEAM. A

17 VETTING REGISTRAR MAY BE AN ELECTION OFFICIAL.

18 (12) "VETTING REGISTRATION OBSERVER TEAM" MEANS AT LEAST

19 TWO INDIVIDUALS, ONE OF WHOM IS AFFILIATED WITH THE STATE'S

20 LARGEST POLITICAL PARTY AND ONE OF WHOM IS AFFILIATED WITH THE

21 STATE'S SECOND LARGEST POLITICAL PARTY, WHO SHALL ENSURE THAT

22 ELECTORS AND VOTER REGISTRARS COMPLY WITH THE REQUIREMENTS OF

23 THIS PART 11.

24 (13) "VOTE TRACKING NUMBER" MEANS A UNIQUE, ANONYMOUS

25 TEXT IDENTIFIER ASSIGNED TO AN ELECTOR OR A BALLOT.

26 (14) "VOTING ELIGIBILITY STATUS DISTRIBUTED LEDGER" MEANS

27 A DISTRIBUTED LEDGER THAT INCLUDES THE FOLLOWING ENTRIES:

1 (a) FOR EACH ELECTOR WHO CASTS A VOTE IN PERSON IN
2 ACCORDANCE WITH SECTION 1-7-1104, THE FOLLOWING:

3 (I) A UNIQUE IDENTIFIER FOR THE ENTRY;

4 (II) THE ELECTOR'S UNIQUE VOTER IDENTIFIER;

5 (III) THE GLOBAL POSITIONING SYSTEM LOCATION, ADDRESS, OR
6 PRECINCT WHERE A RECEIVING JUDGE ASSIGNED THE VETTING REGISTRAR
7 TO THE ELECTOR;

8 (IV) WHETHER THE ELECTOR IS AT THE SAME LOCATION AS THE
9 VETTING REGISTRAR WHEN THE VETTING REGISTRAR DETERMINES THAT
10 THE ELECTOR MAY ENTER THE IMMEDIATE VOTING AREA IN ACCORDANCE
11 WITH SECTION 1-7-110;

12 (V) THE NAME OF THE VETTING REGISTRAR WHO DETERMINES
13 THAT THE ELECTOR MAY ENTER THE IMMEDIATE VOTING AREA IN
14 ACCORDANCE WITH SECTION 1-7-110;

15 (VI) WHEN THE VETTING REGISTRAR BEGINS TO DETERMINE
16 WHETHER THE ELECTOR MAY ENTER THE IMMEDIATE VOTING AREA IN
17 ACCORDANCE WITH SECTION 1-7-110, EXPRESSED IN COORDINATED
18 UNIVERSAL TIME;

19 (VII) WHEN THE VETTING REGISTRAR DETERMINES THAT THE
20 ELECTOR MAY ENTER THE IMMEDIATE VOTING AREA IN ACCORDANCE WITH
21 SECTION 1-7-110, EXPRESSED IN COORDINATED UNIVERSAL TIME;

22 (VIII) WHEN THE TOKEN ASSIGNMENT REGISTRAR ISSUES THE
23 ELECTOR A VOTE TRACKING NUMBER, EXPRESSED IN COORDINATED
24 UNIVERSAL TIME; AND

25 (IX) A PREVIOUS HASH.

26 (b) FOR EACH ELECTOR WHO CASTS A VOTE BY MAIL IN
27 ACCORDANCE WITH SECTION 1-7-1105, THE FOLLOWING:

- 1 (I) A UNIQUE IDENTIFIER FOR THE ENTRY;
- 2 (II) THE ELECTOR'S UNIQUE VOTER IDENTIFIER;
- 3 (III) THE GLOBAL POSITIONING SYSTEM LOCATION, ADDRESS, OR
4 PRECINCT WHERE AN ELECTION OFFICIAL ASSIGNED THE VETTING
5 REGISTRAR TO THE ELECTOR;
- 6 (IV) WHETHER THE ELECTOR IS AT THE SAME LOCATION AS THE
7 VETTING REGISTRAR WHEN THE VETTING REGISTRAR RECEIVES
8 CONFIRMATION PURSUANT TO SECTION 1-7-1105 (2)(b) FROM THE
9 ELECTOR THAT THE ELECTOR'S BALLOT HAS BEEN RECEIVED;
- 10 (V) THE NAME OF THE VETTING REGISTRAR WHO RECEIVES
11 CONFIRMATION PURSUANT TO SECTION 1-7-1105 (2)(b) FROM THE
12 ELECTOR THAT THE ELECTOR'S BALLOT HAS BEEN RECEIVED;
- 13 (VI) WHEN THE VETTING REGISTRAR NOTIFIED THE ELECTOR,
14 PURSUANT TO SECTION 1-7-1105 (2)(a), THAT THE ELECTOR'S BALLOT HAS
15 BEEN RECEIVED, EXPRESSED IN COORDINATED UNIVERSAL TIME;
- 16 (VII) WHEN THE VETTING REGISTRAR RECEIVES CONFIRMATION
17 PURSUANT TO SECTION 1-7-1105 (2)(b) FROM THE ELECTOR THAT THE
18 ELECTOR'S BALLOT HAS BEEN RECEIVED, EXPRESSED IN COORDINATED
19 UNIVERSAL TIME;
- 20 (VIII) WHEN THE TOKEN ASSIGNMENT REGISTRAR ASSOCIATES A
21 VOTE TRACKING NUMBER WITH THE ELECTOR'S BALLOT, EXPRESSED IN
22 COORDINATED UNIVERSAL TIME; AND
- 23 (IX) A PREVIOUS HASH.

24 **1-7-1104. Voting transparency protocol for in-person voting.**

25 (1) (a) UPON AN ELECTOR ARRIVING AT A POLLING LOCATION, AN
26 ELECTION JUDGE SHALL ASSIGN THAT ELECTOR TO A VETTING
27 REGISTRATION OBSERVER TEAM AND A VETTING REGISTRAR. THE

1 ELECTOR'S ASSIGNED VETTING REGISTRATION OBSERVER TEAM SHALL
2 ESCORT THE ELECTOR TO THE ELECTOR'S ASSIGNED VETTING REGISTRAR.

3 (b) THE ELECTOR AND THE ELECTOR'S ASSIGNED VETTING
4 REGISTRAR SHALL COMPLY WITH THE REQUIREMENTS OF SECTION 1-7-110
5 WHILE BEING OBSERVED BY A VETTING REGISTRATION OBSERVER TEAM.

6 (c) UPON DETERMINING THAT AN ELECTOR MAY ENTER THE
7 IMMEDIATE VOTING AREA IN ACCORDANCE WITH SECTION 1-7-110, THE
8 VETTING REGISTRAR SHALL, IN THE PRESENCE OF A VETTING REGISTRATION
9 OBSERVER TEAM, UPDATE THE VOTER ELIGIBILITY STATUS DISTRIBUTED
10 LEDGER TO INCLUDE AN ENTRY WITH THE FOLLOWING:

11 (I) A UNIQUE IDENTIFIER FOR THE ENTRY;

12 (II) THE ELECTOR'S UNIQUE VOTER IDENTIFIER;

13 (III) THE GLOBAL POSITIONING SYSTEM LOCATION, ADDRESS, OR
14 PRECINCT WHERE A RECEIVING JUDGE ASSIGNED THE VETTING REGISTRAR
15 TO THE ELECTOR;

16 (IV) WHETHER THE ELECTOR IS AT THE SAME LOCATION AS THE
17 VETTING REGISTRAR WHEN THE VETTING REGISTRAR DETERMINES THAT
18 THE ELECTOR MAY ENTER THE IMMEDIATE VOTING AREA IN ACCORDANCE
19 WITH SECTION 1-7-110;

20 (V) THE NAME OF THE VETTING REGISTRAR WHO DETERMINES
21 THAT THE ELECTOR MAY ENTER THE IMMEDIATE VOTING AREA IN
22 ACCORDANCE WITH SECTION 1-7-110;

23 (VI) WHEN THE VETTING REGISTRAR BEGINS TO DETERMINE
24 WHETHER THE ELECTOR MAY ENTER THE IMMEDIATE VOTING AREA IN
25 ACCORDANCE WITH SECTION 1-7-110, EXPRESSED IN COORDINATED
26 UNIVERSAL TIME; AND

27 (VII) WHEN THE VETTING REGISTRAR DETERMINES THAT THE

1 ELECTOR MAY ENTER THE IMMEDIATE VOTING AREA IN ACCORDANCE WITH
2 SECTION 1-7-110, EXPRESSED IN COORDINATED UNIVERSAL TIME.

3 (d) AFTER UPDATING THE VOTER ELIGIBILITY STATUS DISTRIBUTED
4 LEDGER, THE VETTING REGISTRAR SHALL ASSIGN THE ELECTOR TO A TOKEN
5 ASSIGNMENT OBSERVER TEAM AND A TOKEN ASSIGNMENT REGISTRAR.

6 (2) (a) THE ELECTOR'S ASSIGNED TOKEN ASSIGNMENT OBSERVER
7 TEAM SHALL ESCORT THE ELECTOR TO THE ASSIGNED TOKEN ASSIGNMENT
8 REGISTRAR.

9 (b) THE ELECTOR'S ASSIGNED TOKEN ASSIGNMENT REGISTRAR
10 SHALL ISSUE THE ELECTOR A VOTE TRACKING NUMBER WHILE BEING
11 OBSERVED BY THE ELECTOR'S ASSIGNED TOKEN ASSIGNMENT OBSERVER
12 TEAM. THE TOKEN ASSIGNMENT OBSERVER TEAM SHALL ENSURE THAT THE
13 TOKEN ASSIGNMENT REGISTRAR ISSUES THE ELECTOR A VOTE TRACKING
14 NUMBER IN AN ANONYMOUS MANNER.

15 (c) UPON ISSUING AN ELECTOR A VOTE TRACKING NUMBER, WHILE
16 IN THE PRESENCE OF THE TOKEN ASSIGNMENT OBSERVER TEAM, THE
17 TOKEN ASSIGNMENT REGISTRAR SHALL UPDATE THE TOKEN ASSIGNMENT
18 STATUS DISTRIBUTED LEDGER TO INCLUDE AN ENTRY WITH THE
19 FOLLOWING:

20 (I) A UNIQUE IDENTIFIER FOR THE ENTRY;

21 (II) THE VOTE TRACKING NUMBER THAT THE TOKEN ASSIGNMENT
22 REGISTRAR ISSUED TO THE ELECTOR;

23 (III) THE NAME OF THE TOKEN ASSIGNMENT REGISTRAR WHO
24 ISSUED THE VOTE TRACKING NUMBER;

25 (IV) THE GLOBAL POSITIONING SYSTEM LOCATION, ADDRESS, OR
26 PRECINCT WHERE THE TOKEN ASSIGNMENT REGISTRAR ISSUED THE VOTE
27 TRACKING NUMBER;

1 (V) A PREVIOUS HASH; AND

2 (VI) FOR ELECTRONIC BALLOTS, A SECURE PERSONAL
3 IDENTIFICATION NUMBER; AND

4 (d) UPON THE TOKEN ASSIGNMENT REGISTRAR UPDATING THE
5 TOKEN ASSIGNMENT STATUS DISTRIBUTED LEDGER PURSUANT TO
6 SUBSECTION (2)(c) OF THIS SECTION, THE VETTING REGISTRAR SHALL
7 UPDATE THE VOTING ELIGIBILITY STATUS DISTRIBUTED LEDGER TO
8 INCLUDE:

9 (I) WHEN THE TOKEN ASSIGNMENT REGISTRAR ISSUED THE
10 ELECTOR A VOTE TRACKING NUMBER, EXPRESSED IN COORDINATED
11 UNIVERSAL TIME; AND

12 (II) A PREVIOUS HASH.

13 (e) AFTER A TOKEN ASSIGNMENT REGISTRAR ISSUES AN ELECTOR
14 A VOTE TRACKING NUMBER, THE ELECTOR MAY ENTER THE IMMEDIATE
15 VOTING AREA AND COMPLETE THE ELECTOR'S BALLOT.

16 (3) (a) IF AN ELECTOR IS ISSUED A PAPER BALLOT IN ACCORDANCE
17 WITH SECTION 1-7-304, ONCE THE ELECTOR HAS COMPLETED THE
18 ELECTOR'S BALLOT AND IS READY TO VOTE, THE ELECTOR SHALL LEAVE
19 THE VOTING BOOTH AND APPROACH A TOKEN ASSIGNMENT REGISTRAR. IF
20 THE VOTE TRACKING NUMBER HAS NOT ALREADY BEEN ATTACHED TO THE
21 BALLOT, THE ELECTOR SHALL, IN FULL VIEW OF A TOKEN ASSIGNMENT
22 OBSERVER TEAM AND A TOKEN ASSIGNMENT REGISTRAR, ATTACH THE
23 ELECTOR'S VOTE TRACKING NUMBER TO THE ELECTOR'S BALLOT AND
24 DEPOSIT BOTH IN THE BALLOT BOX.

25 (b) IF AN ELECTOR CASTS A VOTE WITH ELECTRONIC VOTING
26 EQUIPMENT IN ACCORDANCE WITH SECTION 1-7-503 (1) AND (2), AND A
27 VOTE TRACKING NUMBER HAS NOT ALREADY BEEN ATTACHED TO THE

1 BALLOT, ONCE THE ELECTOR HAS PLACED THE ELECTOR'S BALLOT IN A
2 PRIVACY ENVELOPE, THE ELECTOR SHALL LEAVE THE VOTING BOOTH AND
3 APPROACH A TOKEN ASSIGNMENT REGISTRAR. THE ELECTOR SHALL, IN
4 FULL VIEW OF A TOKEN ASSIGNMENT OBSERVER TEAM AND A TOKEN
5 ASSIGNMENT REGISTRAR, ATTACH THE ELECTOR'S VOTE TRACKING
6 NUMBER TO THE ELECTOR'S BALLOT AND DEPOSIT THE BALLOT OR BALLOT
7 CARD WITH THE ATTACHED VOTE TRACKING NUMBER IN THE BALLOT BOX
8 WITH THE OFFICIAL ENDORSEMENT ON THE BALLOT OR BALLOT CARD
9 FACING UPWARD.

10 (c) IF AN ELECTOR CASTS A VOTE IN A MANNER OTHER THAN THOSE
11 DESCRIBED IN SUBSECTIONS (3)(a) AND (3)(b) OF THIS SECTION, THE
12 COUNTY CLERK AND RECORDER SHALL ENSURE THAT THERE IS A METHOD
13 FOR THE ELECTOR TO ATTACH THE ELECTOR'S VOTE TRACKING NUMBER TO
14 THE ELECTOR'S BALLOT OR OTHERWISE ASSOCIATE THE ELECTOR'S TOKEN
15 WITH THE ELECTOR'S BALLOT AND FOR AN ELECTRONIC ENTRY CAST VOTE
16 RECORD TO BE ADDED TO THE CAST VOTE RECORD DISTRIBUTED LEDGER.
17 THE ELECTOR SHALL FOLLOW THE METHOD PRESCRIBED BY THE COUNTY
18 CLERK AND RECORDER.

19 (d) IF AN ELECTOR IS UNABLE TO ATTACH A VOTE TRACKING
20 NUMBER TO A BALLOT OR BALLOT CARD IN ACCORDANCE WITH THIS
21 SUBSECTION (3), A TOKEN ASSIGNMENT REGISTRAR MAY ATTACH THE
22 VOTE TRACKING NUMBER TO THE BALLOT OR BALLOT CARD FOR THE
23 ELECTOR SO LONG AS THE TOKEN ASSIGNMENT REGISTRAR DOES SO IN
24 FULL VIEW OF A TOKEN ASSIGNMENT OBSERVER TEAM.

25 (4) AN ELECTION OFFICIAL SHALL ENSURE THAT EVERY ELECTOR
26 WHO CASTS A BALLOT IN ACCORDANCE WITH THIS SECTION IS PROVIDED
27 WITH A COPY OF THE ELECTOR'S BALLOT AND VOTE TRACKING NUMBER

1 BEFORE THE ELECTOR LEAVES THE POLLING LOCATION. A VETTING
2 REGISTRATION OBSERVER TEAM OR A TOKEN ASSIGNMENT OBSERVER
3 TEAM SHALL ENSURE THAT THIS PROCESS MAINTAINS THE ANONYMITY OF
4 THE ELECTOR'S BALLOT AND VOTE TRACKING NUMBER.

5 **1-7-1105. Vote transparency protocols for mail ballot voting.**

6 (1) UPON THE RECEIPT OF A MAIL BALLOT, A RECEIVING JUDGE SHALL
7 ASSIGN THE MAIL BALLOT TO A VETTING REGISTRATION OBSERVER TEAM
8 AND A VETTING REGISTRAR.

9 (2) (a) AFTER A RECEIVING JUDGE HAS VERIFIED THAT AN
10 ELECTOR'S SELF-AFFIRMATION ON THE RETURN ENVELOPE OF A MAIL
11 BALLOT IS VALID IN ACCORDANCE WITH SECTION 1-7.5-204, BUT PRIOR TO
12 OPENING THE MAIL BALLOT, WHILE IN THE PRESENCE OF A VETTING
13 REGISTRATION OBSERVER TEAM, THE VETTING REGISTRAR SHALL NOTIFY
14 THE ELECTOR THAT THE ELECTOR'S BALLOT HAS BEEN RECEIVED AND WILL
15 ONLY BE COUNTED AFTER THE ELECTOR ACKNOWLEDGES THE MAIL
16 BALLOT'S RECEIPT.

17 (b) ONCE THE VETTING REGISTRAR, WHILE IN THE PRESENCE OF
18 THE VETTING REGISTRATION OBSERVER TEAM, UNLESS THE VOTER ROLLS
19 HAVE BEEN WIPED COMPLETELY CLEAN PRIOR TO THE ELECTION, RECEIVES
20 CONFIRMATION FROM THE ELECTOR THAT THE ELECTOR'S BALLOT HAS
21 BEEN RECEIVED, THE VETTING REGISTRAR SHALL SIGN A FORM INDICATING
22 THAT THE ELECTOR CONFIRMED THE RECEIPT OF THE BALLOT AND THAT A
23 TOKEN ASSIGNMENT REGISTRAR MAY ASSIGN A VOTE TRACKING NUMBER
24 TO THE BALLOT.

25 (c) THE VETTING REGISTRAR SHALL, IN THE PRESENCE OF A
26 VETTING REGISTRATION OBSERVER TEAM, UPDATE THE VOTER ELIGIBILITY
27 STATUS DISTRIBUTED LEDGER TO INCLUDE AN ENTRY WITH THE

1 FOLLOWING:

2 (I) A UNIQUE IDENTIFIER FOR THE ENTRY;

3 (II) THE ELECTOR'S UNIQUE VOTER IDENTIFIER;

4 (III) THE GLOBAL POSITIONING SYSTEM LOCATION, ADDRESS, OR
5 PRECINCT OF THE VETTING REGISTRAR WHERE A RECEIVING JUDGE
6 ASSIGNED THE VETTING REGISTRAR TO THE ELECTOR;

7 (IV) WHETHER THE ELECTOR IS AT THE SAME LOCATION AS THE
8 VETTING REGISTRAR WHEN THE VETTING REGISTRAR RECEIVES
9 CONFIRMATION PURSUANT TO SUBSECTION (2)(b) OF THIS SECTION FROM
10 THE ELECTOR THAT THE ELECTOR'S BALLOT HAS BEEN RECEIVED;

11 (V) THE NAME OF THE VETTING REGISTRAR WHO RECEIVED
12 CONFIRMATION PURSUANT TO SUBSECTION (2)(b) OF THIS SECTION FROM
13 THE ELECTOR THAT THE ELECTOR'S BALLOT HAS BEEN RECEIVED;

14 (VI) WHEN THE VETTING REGISTRAR NOTIFIED THE ELECTOR
15 PURSUANT TO SUBSECTION (2)(a) OF THIS SECTION THAT THE ELECTOR'S
16 BALLOT HAS BEEN RECEIVED, EXPRESSED IN COORDINATED UNIVERSAL
17 TIME; AND

18 (VII) WHEN THE VETTING REGISTRAR RECEIVES CONFIRMATION
19 PURSUANT TO SUBSECTION (2)(b) OF THIS SECTION FROM THE ELECTOR
20 THAT THE ELECTOR'S BALLOT HAS BEEN RECEIVED, EXPRESSED IN
21 COORDINATED UNIVERSAL TIME.

22 (3) AFTER RECEIVING A BALLOT WITH THE SIGNED FORM
23 DESCRIBED IN SUBSECTION (2)(b) OF THIS SECTION, A TOKEN ASSIGNMENT
24 REGISTRAR SHALL, WHILE IN THE PRESENCE OF A TOKEN ASSIGNMENT
25 OBSERVER TEAM, ASSIGN A VOTE TRACKING NUMBER TO THE BALLOT IF
26 ONE HAS NOT ALREADY BEEN ASSIGNED. THE TOKEN ASSIGNMENT
27 OBSERVER TEAM SHALL ENSURE THAT THE TOKEN ASSIGNMENT REGISTRAR

1 ASSIGNS THE VOTE TRACKING NUMBER TO THE BALLOT IN AN ANONYMOUS
2 MANNER.

3 (4) UPON ASSIGNING A VOTE TRACKING NUMBER TO A BALLOT, IN
4 THE PRESENCE OF A TOKEN ASSIGNMENT OBSERVER TEAM, THE TOKEN
5 ASSIGNMENT REGISTRAR SHALL UPDATE THE TOKEN ASSIGNMENT STATUS
6 DISTRIBUTED LEDGER TO INCLUDE AN ENTRY WITH THE FOLLOWING:

7 (a) A UNIQUE IDENTIFIER FOR THE ENTRY;

8 (b) THE VOTE TRACKING NUMBER THAT THE TOKEN ASSIGNMENT
9 REGISTRAR ASSIGNED TO THE BALLOT;

10 (c) THE NAME OF THE TOKEN ASSIGNMENT REGISTRAR WHO
11 ASSIGNED THE VOTE TRACKING NUMBER;

12 (d) THE GLOBAL POSITIONING SYSTEM LOCATION, ADDRESS, OR
13 PRECINCT WHERE THE TOKEN ASSIGNMENT REGISTRAR ASSIGNED THE VOTE
14 TRACKING NUMBER;

15 (e) A PREVIOUS HASH; AND

16 (f) IF THE ELECTOR SO CHOOSES, A SECURE PERSONAL
17 IDENTIFICATION NUMBER;

18 (5) UPON THE TOKEN ASSIGNMENT REGISTRAR UPDATING THE
19 TOKEN ASSIGNMENT STATUS DISTRIBUTED LEDGER PURSUANT TO
20 SUBSECTION (4) OF THIS SECTION, THE VETTING REGISTRAR SHALL UPDATE
21 THE VOTING ELIGIBILITY STATUS DISTRIBUTED LEDGER TO INCLUDE:

22 (a) WHEN THE TOKEN ASSIGNMENT REGISTRAR ASSOCIATED A
23 VOTE TRACKING NUMBER WITH THE ELECTOR'S BALLOT, EXPRESSED IN
24 COORDINATED UNIVERSAL TIME; AND

25 (b) A PREVIOUS HASH.

26 (6) IN ORDER TO ENSURE PROPER VOTER TRANSPARENCY AND
27 SECURITY, ALL MAIL BALLOTS MUST HAVE TWO IDENTICAL VOTE

1 TRACKING NUMBERS PRINTED AT THE TOP OF THE BALLOT, ONE ON TOP OF
2 THE OTHER, SEPARABLE BY PERFORATION. WHEN FOLDED, THE
3 PERMANENT VOTE TRACKING NUMBER MUST BE OBSCURED BY THE
4 INCLUSION OF A PATTERN OF RANDOMIZED NUMBERS IN THE SAME FONT
5 AND SIZE AS THE VOTE TRACKING NUMBER. ONLY THE VOTE TRACKING
6 NUMBER UNDER THE PERFORATION SHOULD BE MAILED WITH THE MAIL
7 BALLOT. THE VOTE TRACKING NUMBER ABOVE THE PERFORATION MUST BE
8 ABOVE THE SEAL-FOLD OF THE ENVELOPE CONTAINING THE BALLOT TO
9 ENSURE REMOVAL SO THAT THE VOTER RETAINS THE VOTE TRACKING
10 NUMBER. THE INSIDE OF THE RETURN ENVELOPE MUST BE PRINTED WITH
11 A SECURITY PATTERN IN THE SAME COLOR OF INK AS USED ON THE BALLOT
12 TO RENDER THE BALLOT UNREADABLE FROM OUTSIDE OF THE ENVELOPE.

13 **1-7-1106. Vote transparency protocol for counting ballots.**

14 (1) BEFORE ANY BALLOT IS COUNTED, IT MUST BE VERIFIED, IN THE
15 PRESENCE OF A TOKEN ASSIGNMENT OBSERVER TEAM, THAT A UNIQUE
16 VOTE TRACKING NUMBER IS ATTACHED TO THE BALLOT.

17 (2) (a) UPON THE COUNTING OF A BALLOT, UNLESS THE BALLOT IS
18 COUNTED AS PART OF A MANUAL COUNT, A CAST VOTE RECORD OF THE
19 BALLOT MUST BE CREATED AND ENTERED INTO THE CAST VOTE RECORD
20 DISTRIBUTED LEDGER.

21 (b) IF A MAIL BALLOT IS COUNTED AS A PART OF A MANUAL COUNT,
22 A CAST VOTE RECORD DOES NOT HAVE TO BE CREATED FOR THE MAIL
23 BALLOT, AND THE TALLY STATUS REPORT DISTRIBUTED LEDGER MAY BE
24 UPDATED MANUALLY.

25 **1-7-1107. Vote dissemination.** (1) EVERY COUNTY CLERK AND
26 RECORDER SHALL ADOPT A VOTE DISSEMINATION POLICY THAT
27 DETERMINES WHEN THE DISTRIBUTED LEDGERS ASSOCIATED WITH AN

1 ELECTION WILL BECOME PUBLICLY AVAILABLE.

2 (2) THE COUNTY CLERK AND RECORDER SHALL ENSURE THAT THE
3 TALLY STATUS REPORT DISTRIBUTED LEDGER FOR EACH OFFICE, BALLOT
4 ISSUE, OR BALLOT QUESTION THAT IS INDICATED ON A BALLOT IN THE
5 COUNTY IS UPDATED AS SOON AND AS OFTEN AS IS PRACTICABLE AND IN
6 COMPLIANCE WITH THE VOTE DISSEMINATION POLICY DESCRIBED IN
7 SUBSECTION (1) OF THIS SECTION.

8 **1-7-1108. Applicability.** NOTWITHSTANDING ANY LAW TO THE
9 CONTRARY, THIS PART 11 APPLIES IN ALL ELECTIONS IN WHICH NOT ALL
10 BALLOTS ARE COUNTED BY HAND AND SUPERSEDES ANY CONFLICTING
11 PROVISION OF THIS TITLE 1 OR ANY OTHER LAW THAT GOVERNS THE
12 CONDUCT OF ELECTIONS TO WHICH THIS PART 11 APPLIES.

13 **SECTION 2.** In Colorado Revised Statutes, 1-7-304, **repeal** (2)
14 as follows:

15 **1-7-304. Manner of voting in person.** (2) ~~Each eligible elector~~
16 ~~who has completed the ballot and is ready to vote shall then leave the~~
17 ~~voting booth and approach the election judges having charge of the ballot~~
18 ~~box. The elector shall, in full view of the election judges, deposit it in the~~
19 ~~ballot box.~~

20 **SECTION 3.** In Colorado Revised Statutes, 1-7-503, **amend** (1);
21 and **repeal** (2) and (4) as follows:

22 **1-7-503. Manner of voting.** (1) Each eligible elector, upon
23 receiving a ballot, shall immediately proceed unaccompanied to one of
24 the voting booths provided. To cast a vote, the eligible elector shall
25 clearly fill the oval, connect the arrow, or otherwise appropriately mark
26 the name of the candidate or the names of the joint candidates of the
27 elector's choice for each office to be filled. In the case of a ballot issue,

1 the elector shall clearly fill the oval, connect the arrow, or otherwise
2 appropriately mark the appropriate place opposite the answer that the
3 elector desires to give. Before leaving the voting booth, the eligible
4 elector, without displaying the marks thereon, shall place the ballot in the
5 privacy envelope so that the contents of the ballot or ballot card are
6 concealed. ~~and shall place the envelope and the ballot or ballot card in the~~
7 ~~ballot box.~~

8 (2) ~~Each eligible elector who has prepared the ballot and is ready~~
9 ~~to vote shall then leave the voting booth and approach the election judges~~
10 ~~having charge of the ballot box. The eligible elector shall give his or her~~
11 ~~name to one of the election judges. The elector shall, in full view of the~~
12 ~~election judges, deposit the ballot or ballot card in the ballot box, with the~~
13 ~~official endorsement on the ballot or ballot card facing upward.~~

14 (4) ~~Notwithstanding any provision of subsection (1) or (2) of this~~
15 ~~section to the contrary, at a polling location at which a ballot marking~~
16 ~~device, as defined in section 1-5-702 (2.5), is available for accessible~~
17 ~~voting, the election judge in charge of the ballot box shall deposit every~~
18 ~~elector's ballot card in the ballot box.~~

19 **SECTION 4.** In Colorado Revised Statutes, 1-7.5-107, **amend** (6)
20 as follows:

21 **1-7.5-107. Procedures for conducting mail ballot election -**
22 **primary elections - first-time voters casting a mail ballot after having**
23 **registered by mail to vote - in-person request for ballot - repeal.**

24 (6) All deposited ballots shall be counted as provided in this article and
25 by rules promulgated by the secretary of state. A mail ballot is valid and
26 shall be counted only if it is returned in the return envelope, the
27 self-affirmation on the return envelope is signed and completed by the

1 eligible elector to whom the ballot was issued, THE ELIGIBLE ELECTOR
2 CONFIRMS THE RECEIPT OF THE MAIL BALLOT IN ACCORDANCE WITH
3 SECTION 1-7-1104 (2), and the information on the return envelope is
4 verified in accordance with subsection (5) of this section. Mail ballots
5 shall be counted in the same manner provided by section 1-7-307 for
6 counting paper ballots or section 1-7-507 for counting electronic ballots.
7 If the election official determines that an eligible elector to whom a
8 replacement ballot has been issued has returned more than one ballot, the
9 first ballot received is the accepted ballot. All candidates and issues for
10 which the voter is eligible to vote will be counted on the accepted ballot.
11 Rejected ballots shall be handled in the same manner as provided in
12 sections 1-7.5-204 and 1-7.5-210.

13 **SECTION 5. Safety clause.** The general assembly finds,
14 determines, and declares that this act is necessary for the immediate
15 preservation of the public peace, health, or safety or for appropriations for
16 the support and maintenance of the departments of the state and state
17 institutions.