



LOGIC AND ACCURACY QUESTIONS TO ASK BEFORE THE PUBLIC TESTING

This checklist includes significant changes from Texas Senate Bill 2166. Major changes: testing must occur no later than 48 days before election day (previously 48 hours), expanded hash validation requirements, mandatory electronic pollbook testing, and enhanced failure protocols. Items marked [SB2166] indicate new or modified requirements.

PRE L&A QUESTIONS:¹

- **Can you provide the EAC Certificate?²**
- **When was the last time you scanned the equipment for viruses?.**
- **When was the battery replaced? Is it older than 3 years?**
- **When was the last time ES&S did maintenance?**
- **Did you back up the tabulator before maintenance was done?**
- **Do you have a logbook for the storage of tabulators, that notes who had access to the systems?**
- **Who will be on the testing board?³ (must be at least 2 with reasonable attempt to have one person from each party that holds primary. Both the general custodian AND testing board must prepare and conduct first test together.**
- **When will the Logic and Accuracy take place?⁴ (Must be no later than 48 days before election day. If the test cannot be conducted by this deadline, custodian must notify the Secretary of State within 24 hours.)**

BALLOT CREATION QUESTIONS

<input checked="" type="checkbox"/>	Questions	Answer/Comment
	Who created the test matrix/pattern/script?	
	Who created the test ballots?	
	Who made the actual ballots?	
	How many ballot styles? ⁵	
	How many ballots in the test deck?	
	What is your FORMULA for number of ballots in the test deck?	

¹ <https://uscase.org>

² Texas Election Code 122.001.a.3 <https://statutes.capitol.texas.gov/Docs/EL/htm/EL.122.htm>

³ Texas Election Code 129.023 a <https://statutes.capitol.texas.gov/Docs/EL/htm/EL.129.htm>

⁴ Texas Election Code 129.023 b <https://statutes.capitol.texas.gov/Docs/EL/htm/EL.129.htm>

⁵ Texas Election Code 129.023.c. 2 <https://statutes.capitol.texas.gov/Docs/EL/htm/EL.129.htm>

DOES THE TEST DECK INCLUDE:

<input checked="" type="checkbox"/>	Description	Comment
	Every Ballot Style/Precinct ⁶ (Must include all types of ballots used in the election.)	
	A vote for every choice on the ballot ⁷	
	Undervotes ⁸	
	Overvotes ⁹	
	Blank Ballots. How many? (at least 10)	
	Write-In votes ¹⁰	
	Unique number of votes casts per candidate per race? ¹¹	
	Is a prime number assigned to each contest?	
	Provisional ¹²	
	Limited	
	Labeled “TEST” ¹³ (Must be marked to ensure not used in upcoming election.)	
	Absentee ¹⁴ (Folded: Recommend at least 10%) (Test Bleed Through with Sharpie) Both are recommended in SOS training (Must include mail ballot stock.)¹⁵	
	Handmarked by Public ¹⁶	
	Ballots marked by ballot marking devices ¹⁷	

⁶ Texas Election Code 129.023.c.2 <https://statutes.capitol.texas.gov/Docs/EL/htm/EL.129.htm>

⁷ Ibid

⁸ Texas Election Code 129.023.c.3 <https://statutes.capitol.texas.gov/Docs/EL/htm/EL.129.htm>

⁹ ibid

¹⁰ Texas Election Code 129.023.c.4 <https://statutes.capitol.texas.gov/Docs/EL/htm/EL.129.htm>

¹¹ <https://www.sos.state.tx.us/elections/forms/seminar/2023/41st/logic-and-accuracy-testing.pdf>

¹² Texas Election Code 129.023.c.5 <https://statutes.capitol.texas.gov/Docs/EL/htm/EL.129.htm>

¹³ Texas Election Code 129.023.c.12 <https://statutes.capitol.texas.gov/Docs/EL/htm/EL.129.htm>

¹⁴ <https://www.sos.state.tx.us/elections/forms/seminar/2023/41st/logic-and-accuracy-testing.pdf>

¹⁵ Texas Election Code 129.023.c.11 <https://statutes.capitol.texas.gov/Docs/EL/htm/EL.129.htm>

¹⁶ <https://www.sos.state.tx.us/elections/forms/seminar/2023/41st/logic-and-accuracy-testing.pdf>

¹⁷ Texas Election Code 129.023.c.10 <https://statutes.capitol.texas.gov/Docs/EL/htm/EL.129.htm>



LOGIC AND ACCURACY

GAME DAY QUESTIONS

HASH VALIDATION TEST¹⁸: AT LEAST ONE PIECE OF EQUIPMENT PER DEVICE AND VERSION (Representative sample = 10 devices or 5% of each type, whichever is fewer.)

¹⁸ Texas Election Code 129.023.c-1 <https://statutes.capitol.texas.gov/Docs/EL/htm/EL.129.htm>

QUESTIONS ON HASH VALIDATION

	Was Hash performed on at least one piece of equipment per device type and version? ¹⁹ (Must use representative sample = 10 devices or 5% of each type, whichever is fewer.)						
	<table border="1"><tr><td>Election Management Computers</td><td>Central Scanners</td></tr><tr><td>Ballot Scanners (precinct)</td><td>Tabulation computers</td></tr><tr><td>Ballot Marking Devices (to include for accessible use)</td><td></td></tr></table>	Election Management Computers	Central Scanners	Ballot Scanners (precinct)	Tabulation computers	Ballot Marking Devices (to include for accessible use)	
Election Management Computers	Central Scanners						
Ballot Scanners (precinct)	Tabulation computers						
Ballot Marking Devices (to include for accessible use)							
	How were these particular machines selected?						
	List the machine types and versions tested						
	Were these the same machines that have been tested before?						
	What is the source of software comparison tool? ²⁰						
	Is the comparing computer connected to the internet? ²¹						
	Are the USBs new and unused? ²² Can you show us before you load the information from the equipment?						
	Was the Hash Validation test successful for each machine? (Must demonstrate the source code remains unaltered)						
	Was the Hash Validation performed before counting any ballots? ²³						
	Were the ballots counted on the same machines that were hash validated?						

¹⁹ <https://www.sos.state.tx.us/elections/forms/seminar/2023/41st/logic-and-accuracy-testing.pdf>

²⁰ ibid

²¹ ibid

²²<https://www.sos.state.tx.us/elections/forms/seminar/2023/41st/logic-and-accuracy-testing.pdf>

²³<https://www.sos.state.tx.us/elections/forms/seminar/2023/41st/logic-and-accuracy-testing.pdf>



LOGIC AND ACCURACY GAME DAY QUESTIONS

TESTING THE BALLOTS

	Did they scan ballots in all four orientations? ²⁴ (top rightside in, top backwards, flipped rightside in, flipped backwards)	
	Did the testing board cast ballots? ²⁵	
	Does each ballot get tested on each scanner?	
	Are all ballot positions tested? (Related to created ballots above)	
	Did they test any print on demand ballots? (if applicable)	
	How many ExpressVote ballots will be tested per precinct?	
	How many scanners will be used to count? <ul style="list-style-type: none">• Today?• During the Election <p>(Central count equipment must be tested before AND after each counting session)²⁶</p>	Today _____ Election _____

TESTING EQUIPMENT

How were these machines in particular selected for the Public Logic and Accuracy Test?	
Are these the same machines that were tested before?	
Can the same ballot be reinserted into the tabulator if removed?	
Can copies be inserted into the tabulator and will they count?	

²⁴ <https://www.sos.state.tx.us/elections/forms/seminar/2023/41st/logic-and-accuracy-testing.pdf>

²⁵ Texas Election Code 129.023.c.1 <https://statutes.capitol.texas.gov/Docs/EL/htm/EL.129.htm>

²⁶ Texas Election Code 127.093 <https://law.justia.com/codes/texas/election-code/title-8/chapter-127/subchapter-d/section-127-093/>

TESTING EQUIPMENT CON'T

Will the Test include?²⁷

- Hand-marked ballots
- Ballot marking device ballots
- DRE
- E-pollbook (best practice)
- Tabulators
- Central Scanners
- Central accumulator
- Election Night Reporting

(Must test each type of automatic tabulating equipment, ballot marking device, and direct recording electronic voting device.)²⁸

DRE (Curbside) must be cast in teams of two²⁹

- Date and Time _____
- Zero report³⁰
- Check Modem Status on Configuration Tape

Tabulators

- Check Date and Time on each tabulator_____
- Zero Reports³¹
- Check Modem Status on Configuration Tape

Did the expected results match the actual reported results?³² (If unsuccessful, must identify cause, publish written explanation online, retain test materials, and conduct public retest.)³³

²⁷ <https://www.sos.state.tx.us/elections/forms/seminar/2023/41st/logic-and-accuracy-testing.pdf>

²⁸ Texas Election Code 129.023.c.10 <https://statutes.capitol.texas.gov/Docs/EL/htm/EL.129.htm>

²⁹ Texas Election Code 129.023.c.8 <https://statutes.capitol.texas.gov/Docs/EL/htm/EL.129.htm>

³⁰ Texas Election Code 129.023.c.7 <https://statutes.capitol.texas.gov/Docs/EL/htm/EL.129.htm>

³¹ Ibid

³² Texas Election Code 129.023.d <https://statutes.capitol.texas.gov/Docs/EL/htm/EL.129.htm>

³³ Texas Election Code 129.023.c.13 <https://statutes.capitol.texas.gov/Docs/EL/htm/EL.129.htm>

TESTING EQUIPMENT CON'T

Was SOS form filled out? “Certification Of Hash Validation, Public Logic And Accuracy Test And First Test Of Automatic Tabulating Equipment”³⁴

Is a copy of the system’s software being stored at a secure location at a secure location outside of the administrator’s and programming entitiy’s control for at least 22 months after election day?

ELECTRONIC POLLBOOK TESTING (Required within 48 hours before voting begins. Separate from the main L&A test)³⁵

When will electronic pollbook testing take place?
(Must be within 48 hours before voting begins)

Was public notice provided at least 48 hours before the test?

Verify voter databases are correctly loaded

Verify peripheral devices function properly

Verify ballot styles are correctly assigned

Verify ballots are readable by voting systems

If testing fails, was written explanation published online?

If testing fails, was public retest conducted?

³⁴ Texas Election Code 129.023.e.1 <https://statutes.capitol.texas.gov/Docs/EL/htm/EL.129.htm>

³⁵ Texas Election Code 129.0231.a <https://statutes.capitol.texas.gov/Docs/EL/htm/EL.129.htm>



LOGIC AND ACCURACY AFTER THE TESTING

DOCUMENTS TO COLLECT BY PUBLIC INFO REQUEST

	Reports from any ExpressVote machines
	Reports from all Tabulators tested
	Reports from Hardware Diagnostics Test ³⁶
	Audit Logs
	Cast Vote Records from the L&A test
	Ballot Image in c and I formats.
	Digital Image of Certificate
	Written Explanation if testing was unsuccessful
	Records of hash validation testing
	Records of electronic pollbook testing

This checklist was updated January 2026 to incorporate SB2166 requirements. All citations verified against current Texas Election Code.

³⁶ Texas Election Code 129 Subchapter B <https://statutes.capitol.texas.gov/Docs/EL/htm/EL.129.htm>