

About the Quick Start Guides: The EAC's Quick Start Guides are intended to familiarize local election officials with various topics they will likely encounter in election administration. The guides are a starting point to identify areas of concern and give officials a broad idea of factors they should consider in approaching a given topic.

What is Logic & Accuracy Testing?

Thorough logic & accuracy testing (L&A testing) ensures the election and voting equipment function as expected and accurately count votes as marked. Documenting L&A testing is critical as this is the point where most voting equipment transitions into "election mode." Testing cannot start until ballots are proofed and finalized but should be completed before voting begins. With this tight timeframe, preparation is key. Remember to review and follow state laws and regulations in developing your testing procedures.

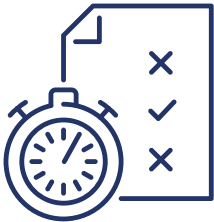
Prepare

- **Develop** a checklist for each type of equipment to be tested (central count and precinct scanners, ballot marking devices (BMD), DREs, ballot activation devices, electronic pollbooks, ballot-on-demand systems, etc.).
- **Assign** equipment to Election Day polling places, early voting locations, and central counting.
- **Choose** a voting pattern with every choice voted at least once and include overvotes, undervotes, and unmarked ballots.
- **Generate** the test deck for hand-marked paper ballots. If you use a preprinted test deck, make sure to include some hand-marked ballots with an assortment of marks (checkmarks, dots, circles, etc.) and a variety of folds. For BMDs, print the test deck during the testing procedure.
- **Determine** staffing needs and secure the testing space.
- **Provide** public notice of testing and invite media and candidate/political party representatives to attend.

Testing Checklist

- ✓ Check physical condition
- ✓ Check time and date (including daylight savings time)
- ✓ Check batteries
- ✓ Check and verify all steps needed to load election data

Test



- **Conduct** testing in pairs (bipartisan, if required).
- **Use** a separate checklist for each piece of equipment to document its functionality and note any issues.
- **Include** all equipment planned to be used and all backup equipment.
- **For BMDs and DREs, test** the encoder or other ballot activation device to ensure the device generates the correct ballot for each precinct and split and vote the chosen pattern.
- **Verify** the functionality of audio ballots and all accessibility devices on each accessible DRE or BMD.
- **For precinct scanners, test** all ballot styles in use in the given scanner's assigned location. Run all ballot styles on central count scanners.

Review



- **Verify** the results. Review the totals tapes from the precinct scanners and/or DREs, upload all results to the voting system, and generate a precinct-level results report.
- **Investigate** any discrepancies and document the cause. Sometimes a ballot in the test deck is accidentally marked inconsistent with the expected pattern, but other times you may not be able to account for the error. For unaccounted errors, identify the piece of equipment involved and consider replacing it for the election or flag it for further investigation and possible maintenance.
- **Close** the session in the voting system and ensure future sessions (e.g., election night tabulation) do not include test results. Have the testing team apply security seals to the equipment and document seal numbers.
- **Clearly mark** the test deck ballots with "Test Ballot" (if not already labeled) and seal and store them so they are not mistaken for actual election ballots.
- **Document** your testing results and share them with the public.