



DeKalb County
GEORGIA

Voter Registration and Elections

LOGIC AND ACCURACY TESTING OVERVIEW

TERMINOLOGY

Logic and accuracy testing (L&A) is the process we use before each election to verify that the equipment can create correct ballots and tabulate the votes marked on them. There are three types of equipment being tested.

Poll pads are the first machines you see when you come to vote in person. They are used to create the voter card you will need before you can bring up your ballot on the touchscreen.

Touchscreens display your ballot and then print a paper copy. One part of L&A testing involves verifying that when the poll pad has created a card for a particular type of ballot, that ballot is correctly displayed on the touchscreen.

Tabulators scan your ballot and record the votes you marked on it. If you have voted in person recently, you have seen the ICP tabulators used to scan ballots at the polling places. We have similar machines in the central office that scan absentee and provisional ballots. L&A testing involves verifying that when a ballot is marked, for example by a touchscreen, the tabulators can correctly count the votes marked on it.

TEST DECKS

There are a variety of checks we need to do verify that each machine is functioning correctly, but this document will mostly focus on how we know that the tabulators are correctly counting the votes that are marked on the ballots they scan.

Each tabulator scans a **test deck**—a series of test ballots marked with a known pattern. For example, the first ballot is typically marked with votes for the first candidate in every contest; the second ballot is marked with votes for the second candidates; and so forth. In this example, when we produce the results, we would expect each candidate to have one vote. In reality, there will be more votes because we scan more than one type of ballot on most tabulators; but we can calculate what the expected outcome should be.

In a county this size, the expected outcome calculation involves a great deal of arithmetic. There are 191 different types of ballots that voters will be able to receive in the upcoming general election. We are testing them on 176 tabulators for election day, 35 for advance voting, 4 for absentee ballots, and one for provisionals. There are separate test decks for absentee and advance voting; and each election day polling place has a smaller test deck for its own ballots.

RESULTS

Every Monday until the completion of L&A, we will be posting a summary of how many tabulators have been completed, the expected outcome we calculated based on the test decks used, and a report showing that the votes tabulated by the election software are the same as the expected outcome. Please do not be confused. These are not real votes. They are test ballots used only for L&A. As part of the process, we post a zero report demonstrating that all test votes have been cleared from the system prior to the real election.

We invite the public to observe the process. Details are posted on [our website](#). If you have any questions, you can contact us at voterreg@dekalbcountyga.gov or (404) 298-4020.