

Post Election Audit Summary

August 2, 2011 Special Election (Issue 3)

On September 6, 2011 we conducted a Risk-Limiting Post Election Audit for the August Special Election. A total of 11,130 ballots were cast in - the Strongsville City School District on the Issue 3 Tax Levy.

Our Risk-Limiting audit was based upon the Kaplan-Markov method as explained by Phillip B. Stark and Mark Lindeman. We used a "Probability Proportional to Error Bound with Replacement" selection method utilizing a hopper of assigned ping pong balls. Auditing best practices recommend we split up the total ballots cast into multiple batch types. Our first batch consisted of the Absentee ballot category. Our second batch was made up of the ballots cast in the Election Day, Provisional, Post Election Day and Post Absentee categories. Batches were assigned ping pong balls based upon their error bound - i.e. the greater the possibility of a miscount within a batch, the more ping pong balls assigned, and the more likely it is to be selected.

A master spreadsheet was created with statistical formulas to determine the number of batches that needed to be audited in order to reach a 90% confidence level. This confidence level means the audit has at least a 90% probability of leading to a full recount if the apparent outcome is incorrect. Based on this data, the required numbers of batches to audit is five (5). The following batches were selected:

Strongsville 1-E - Absentee

Strongsville 1-I - Absentee

Strongsville 2-I - Absentee

Strongsville 3-F - Absentee

Strongsville 3-I - Election Day, Provisional, Post Absentee and Post Election Day

In conclusion, a total of 1,080 ballots were audited during the Post Election Audit for the August 2, 2011 Special Election, all results match the Official Certification giving a 100% accuracy rate for the election.