For Release: August 14, 2014

Arapahoe County kicks off innovative audit of elections results
Clerk and Recorder pioneers post-election audit to verify election outcomes

Littleton, CO – The Arapahoe County Clerk and Recorder's Office will conduct a pilot this week of an innovative audit system that verifies the accuracy of election results. Arapahoe is the only Colorado county this year to pilot the new method, known as a risk-limiting audit, which must be implemented statewide by 2017.

Currently, Colorado law calls for a traditional post-election audit, which checks the accuracy of voting machines and tabulation equipment, but does not confirm or correct the outcome of an election. In contrast, a risk-limiting audit uses statistical analysis to verify an election outcome to a high level of confidence.

“Arapahoe County is excited to pilot this risk-limiting audit” said Clerk and Recorder Matt Crane. “The integrity of our elections is paramount. Our voters deserve a process they can have confidence in— one that is fair, transparent and accurate. We believe this pilot helps move our elections forward, as it will increase confidence that election results are correct, and potentially reduce the time and taxpayer resources needed to conduct an effective post-election audit.”

Under current law, counties must manually tally at least 500 randomly selected paper ballots and compare the tally to a count by tabulation machines used in the election. Counties also review the voting record from five percent of electronic voting machines. This sampling method is designed to impose quality control on the machine tabulation, but doesn’t verify the outcome of the contest.

The new risk-limiting audit method involves a hand recount of a sample of randomly selected ballots. The sample size is statistically determined based on the total number of ballots cast, the margin of the contest, and the audit results as they unfold. The method was designed by Dr. Philip B. Stark, Chair of the Statistics Department at the University of California at Berkeley. If the hand recount of the initial sample does not give sufficiently strong evidence that the outcome is correct, more ballots are sampled until the result can be statistically verified with a high level of confidence.

“Risk-limiting audits determine precisely how much hand-counting is necessary to confirm election results to a given level of confidence,” said Dr. Stark. “The closer the contest, the more ballots one must examine to have strong evidence, because fewer errors can change the outcome.”

The Colorado General Assembly passed House Bill 09-1335 requiring counties to implement risk-limiting audits by the November 2017 Coordinated Election.

This week, Arapahoe County’s Election Division will be testing the audit method on two races from the June 24, 2014 Primary Election: the Republican gubernatorial primary race and the Republican primary race for
Colorado House District 37. The County will scan all 2014 Republican Primary Ballots and process the images at its Election Facility in Littleton using Open Count software to tally the votes for each race. Dr. Stark will be on-hand to calculate the appropriate sample size for each race, conduct the hand count and analyze the statistical confidence of the contest outcomes.

“We are very excited that Arapahoe County will be conducting a post-election audit pilot to test risk-limiting audit methodologies,” said Elena Nunez, Executive Director of Colorado Common Cause. “This is critical pioneering work that will help to protect voting rights. We believe that work like this will move Colorado and the country toward a better election process.”

Risk-limiting audits have also been successfully piloted in California and Ohio. Legislation has been introduced in California to expand the use of this method.

Arapahoe County will share the outcome of its risk-limiting audit pilot with the Colorado Secretary of State’s Office and fellow counties, which will help shape the audit process and inform decisions about rules, software and scanning equipment.

“This is an exciting week for election integrity,” said Pam Smith, President of Verified Voting, a non-profit lobbying organization based in Carlsbad, California. “Arapahoe County’s work today will help all election jurisdictions have robust audits in the future.”

For more information about the Arapahoe County Clerk and Recorder’s Office Election Division, please call 303-795-4511 or visit www.arapahoevotes.com.

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Download photos at ftp://ftp.arapahoegov.com/Pub/Communication%20Services/Photos/Election/

Crane.jpeg: Arapahoe County Clerk and Recorder Matt Crane rolls one of ten dice used to create a random selection of ballots for the audit pilot.

Stark.jpeg: Dr. Philip Stark, Chair of the Statistics Department at the University of California at Berkeley and inventor of the risk-limiting audit, administered the pilot at the Arapahoe County Elections Facility.

StarkandCrane.jpeg: Arapahoe County Clerk and Recorder Matt Crane and statistics expert Dr. Philip Stark reviewed 2014 Republican Primary Election ballots by hand in a pilot of the new risk-limiting audit method.