

## **House Bill 1165: Election Law –Manual Postelection Tabulation Audit–Timing and Effect**

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I was contacted by Delegate Cox to provide my professional opinion about this Bill. I take this opportunity to re-emphasize my support for a pre-certification audit that manually examines the voter-verified paper ballots.

Currently, the only pre-certification audit performed in Maryland is a software audit, which is vulnerable to both: (a) intentional alteration of election outcomes and (b) errors in image capture by the scanner. This is because the software audit relies only on the images provided by the scanner and not on the voter-verified paper ballots.

One needs an audit which examines the voter-verified paper ballots. Additionally, such an audit must be performed pre-certification because there should be a means of correcting the announced results if the audit finds significant errors.

This Bill does not describe the type of audit to be used, and it should be amended to require risk-limiting audits (RLAs). I testified a couple of weeks ago on HB 759, currently under consideration by this committee. HB 759 is a more expansive Bill which requires RLAs, enabling the verification of the election outcome.

Respectfully,

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*Note: affiliations are included for identification only*

**Poorvi L. Vora** is Professor of Computer Science at The George Washington University. Her research of the last fifteen years has been in the general area of computer security and privacy, with a special emphasis on the integrity of electronic voting systems. She was a member of the team that deployed end-to-end-verifiable (E2E-V) voting system Scantegrity II in the Takoma Park elections of 2009 and 2011. She has worked with the National Institute of Standards and Technology (NIST) on definitions of desired properties of E2E systems, and on information--theoretic models and measures of voting system security properties. She obtained her Ph.D. from North Carolina State University. She has provided written and oral testimony to Committees of the Maryland Legislature on several Bills and have also provided oral and written testimony to the State Board of Elections.