

**Building A Better Ballot: Creating Quantitative Usability Testing for
Optical Scan Election Ballots.**

by

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ABSTRACT

Poor Election ballot design pervades the nation, yet few studies have quantitatively measure the impact of this poor design on the electorate. Two areas of ballot design are simple to change and require little design expertise, but can have a big impact on the success of a ballot, as defined by the number of correctly cast voters: voting instructions and ballot text size. Voting instructions have long been an afterthought plagued by a lack of organization and grammatical errors. Text size has often been restricted for fear of ballot length impacting voting time, but that concern fails to take into consideration voters' ease – or lack thereof – in reading smaller type. Subjects uses a combination of two instructions and two ballots to determine how instruction and design might impact voting accuracy. The usability test relied on quantitative measurements tallied by a touch tablet, a new methodology for usability testing that could serve as a model for future testing throughout the industry. Two pilot tests were conducted, the first with a stopwatch, the second with the tablet, to test the methodology. The small sample size enabled some testers to skew the results, which in some cases were surprising – for example, testers completed large ballots with poor directions faster than large ballots with good directions. However, the study did show that better directions decrease voting time on smaller ballots. Ultimately, the study served its main purpose of proving a relatively inexpensive way to conduct a quantitative usability study.