From: Whitney Quesenbery
To: votingsystemguidelines@eac.gov
Subject: Comments on UOCAVA Pilot Program Testing Requirements
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Attachments: UPA-comments_to_EAC_on_UOCAVA.pdf

Please accept comments on the UOCAVA Pilot Program Testing Requirements from a group of individuals who work with the UPA Usability in Civic Life project.

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Voluntary Voting System Guidelines Comments
U.S. Election Assistance Commission
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Comments on UOCAVA Pilot Program Testing Requirements

To the U.S. Election Assistance Commission

Thank you for the opportunity to comment on the UOCAVA Pilot Program Testing Requirements. Our comments focus on the proposed requirements in Section 3, Usability, our area of expertise.

We commend the Election Assistance Commission for developing requirements and being concerned with usability, clarity of instructions, interaction design, and ballot legibility. These are all critical issues. If voters cannot understand what they are to do or if the design of the ballot misleads them, voters may vote in ways they did not intend or may miss contests in which they wanted to vote.

However, the proposed requirements have several significant weaknesses which may make them unsuccessful at achieving the overall goal, which is a successful experience for voters.

- The requirements are a considerably abridged version of the full voting systems requirements, even compared to the currently in-force VVSG 2005. We do not understand the rationale for which requirements have been included or excluded.

    Even more confusing, the headings and numbering have been re-arranged, making it unnecessarily difficult to determine the relationship between these abbreviated requirements and the full voting system guidelines.

- Although we agree with the requirements included under 3.3 Clarity of Instructions, we are disappointed that the more detailed plain language guidance in the VVSG 1.1 is not included.

    These guidelines were carefully researched at NIST, with results that point to the importance of well-written instructions in ensuring that voters can cast their ballot as they intend and in a way that does not accidentally invalidate their vote. Instructions are even more important for UOCAVA voters, who often do not receive voter education material and do not have poll workers available to answer questions.

    Several requirements currently under 3.6 Ballot Legibility (3.6 g, h, and i) belong under 3.3 Clarity of Instructions.

- There are no requirements for privacy. The requirements for in 2.4.3 Vote Secrecy do not include the prohibition (in 3.1.7.2 of the VVSG 2005) that the electronic cast vote record not identify any alternative language(s) or accessibility feature(s) used by the voter.

We urge the EAC to include all of the usability requirements in the VVSG 2005 or VVSG 1.1

The entire set of requirements for accessibility, including requirements for font size, contrast and other universal design requirements in the main usability section of VVSG 2005 and VVSG 1.1 have been completely omitted. Although we understand that these requirements are for temporary pilot projects, we believe that this is a serious omission which can cause harm to any final UOCAVA voting system.

- Accessibility is not new. There are well-established techniques for making a system accessible to people with disabilities. There are well-established international standards including the W3C Web Content Authoring Guidelines (WCAG 2.0) and ANSI/ISO and HFES standards for software.

- All federal information and computing technology must meet legal requirements known as "Section 508" and requirements for the built environment in the ADA. UOCAVA voting systems are used by military personnel and have been developed under federal programs. We believe that they must meet Section 508 requirements at a minimum, if not the more specialized requirements developed in the VVSG.

- It is more difficult to retrofit a system for accessibility than it is to design an accessible system from the beginning. The danger is that a seemingly successful UOCAVA pilot will not be able to be made accessible, and will therefore never meet the requirements of HAVA, Section 508, and the VVSG.

- The UOCAVA pilot systems envisioned by these requirements are electronic systems that should be designed to be accessible from the start.

We urge the EAC to include accessibility requirements from Section 3 of the VVSG in the UOCAVA Pilot Program Requirements.

We are also concerned that all of the requirements in Section 3 will be tested by the Manufacturer.

- For the Test Methods of Inspection or Functional Review, a neutral, third-party, expert must be involved in judging conformance. Otherwise, the manufacturers are simply approving their own work.

- For the requirements in Section 3.3 Clarity of Instructions, the Test Entity must be a clear writing specialist hired to do the inspection. If the manufacturers do not know how to write clear instructions, having the manufacturers inspect their own work will not achieve clear

instructions. They won't know that they did not do a good job, and they won't know how to improve their instructions.

- True usability can only be shown through usability testing – having a few representative users try to use the ballot while being observed by a usability specialist. VVSG 2005 requires that the Manufacturer conduct summative usability tests and present the results in a standard format (the CIF) as part of the Technical Data Package.

We urge the Election Assistance Commission to require usability testing of ballots during development as well as functional review and inspection by appropriate experts.

Signed,

Members of the UPA Voting and Usability Project

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