Highlights of the EAC Accessibility Voting Technology Initiative Grant Program

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EAC Accessible Voting

- Grantees
  - Military Heroes Initiative (2010)
  - Information Technology and Innovation Foundation (ITIF, 2011)
    - Two rounds of sub-grants
  - Research Alliance for Accessible Voting (RAAV, 2011)
   - Clemson University and partners

EAC Funded R&D

- Apps4Android
- Association of Assistive Technology Act Programs (ATAP)
- Carnegie Mellon University, Silicon Valley (CMU-SV)
- Center for Information Technology Research in the Interest of Society (CITRIS)
- **Clemson University**
- Election Center
- Election Data Services
- **Georgia Tech Research Institute (GTRI)**
- GT Center for Assistive Technology and Environmental Access (CATEA)
- Michigan State University
- OpenIDEO Innovation Challenge
- Operation BRAVO Foundation
- Paraquad, Inc.
- Rutgers University
- Tennessee Disability Coalition
- UC, Berkeley Election Administration Research Center (EARC)
- **University of Baltimore**
- University of Colorado Denver Assistive Technology Partners (ATP)
- University of Maryland, Baltimore County (UMBC)
- University of Utah
- University of Washington Center for Technology and Disability Studies (UWCTDS)

Over 45 R&D Innovations & Solutions
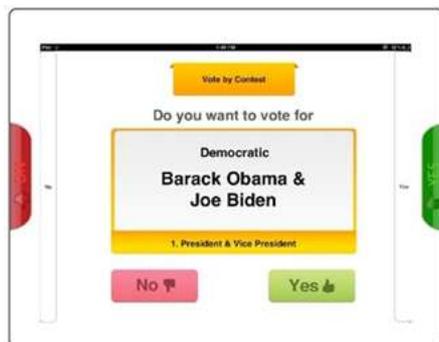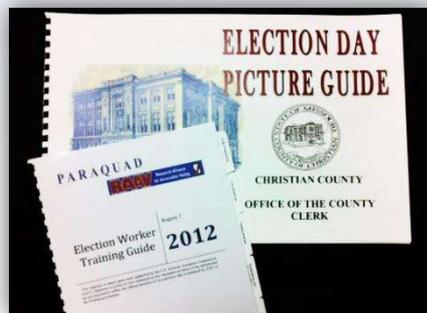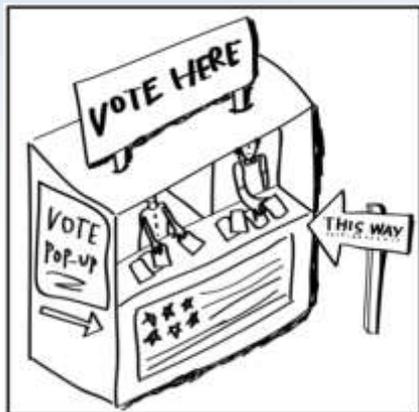
State of Accessibility in Elections

Technology, People, & Experiences

- Common accessible voting system features
  - Enhanced visual display, Speech output, Tactile keypad input, Switch input (dual)
- Most voters with disabilities want to vote in polling places, but many have difficulties and need assistance
- Accessibility barriers result in fewer people registered to vote and lower voter turnout

Sources
Rutgers: http://smlr.rutgers.edu/disability-and-voting-survey-report-2012-elections
Utah & CalTech: http://elections.itif.org/reports/AVTI-001-Hall-Alvarez-2012.pdf
CATEA: http://elections.itif.org/reports/AVTI-005-Sanford-2013.pdf
UMBC: http://elections.itif.org/wp-content/uploads/AVTI-006-Kane-2013.pdf

Military Heroes Project

Military Heroes Project

- Study of accessible voting for military service members who sustained disabling injuries in combat
- Challenges for recently injured military personnel
  - E.g., complex ballots, mobility limitations, memory and concentration difficulties
- Recommendations for election administrators
  - E.g., relax local ballot design requirements, pursue innovative technology
- Recommendations for election system designers
  - Systems must be flexible, portable, and have options for various personal assistive technology (PAT)

AVTI Designs & Prototypes

National Online Training Course

- No cost solution for election officials

- http://www.accessiblevoting.gatech.edu/

Election Day Picture Guide

Sources
Paraquad & TDC: http://www.nist.gov/itl/vote/accessiblevoting/
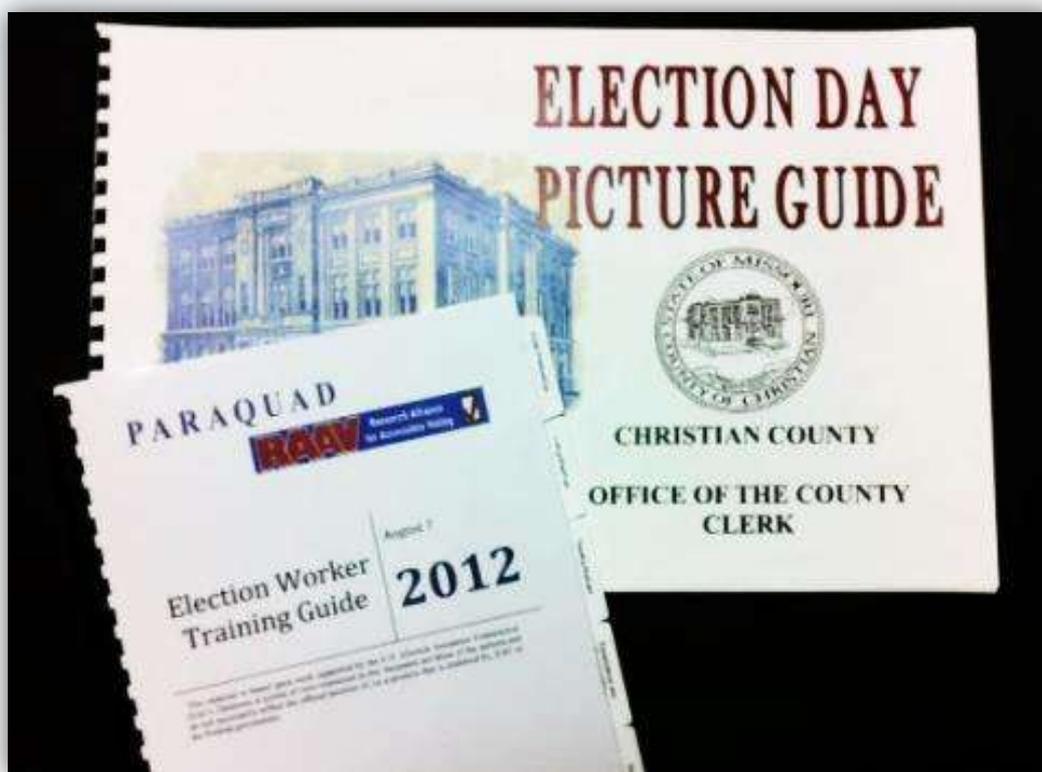
iPad Voting Case Design

Source
GTRI: http://elections.itif.org/wp-content/uploads/AVTI-018-GTRI-Case-2013.pdf

Smart Voting Joystick

Source
MSU: http://elections.itif.org/wp-content/uploads/AVTI-009-MSU-Joystick-2013.pdf

EZ Ballot

- Designed for voters with cognitive, visual, and dexterity limitations

Vote by Contest

Do you want to vote for

Democratic

Barack Obama & Joe Biden

1. President & Vice President

No 👎   Yes 👍

"EZ Review" touch input

"Help" touc...

"No" tactile button

"Yes" tactile button

"No" touch input

"Yes" touch input

Speech Input 😃

Speech Output 🔊

Are you ready to begin voting for Contest 1?

EZ ballot prototype

Prime III
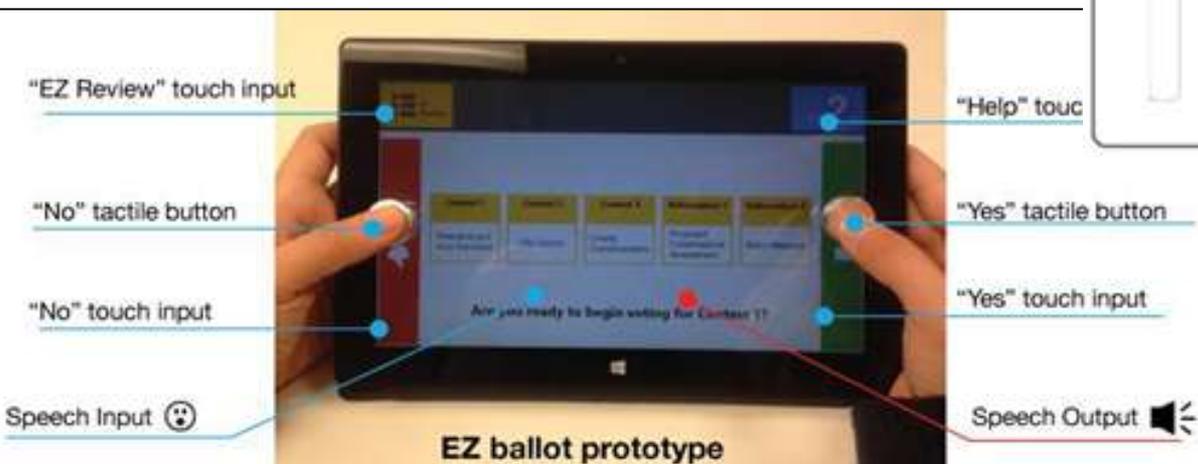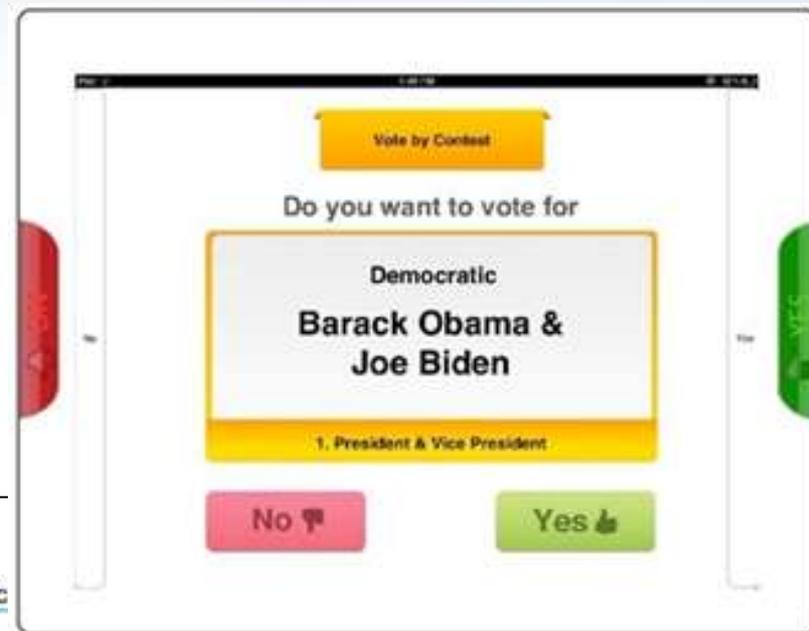
- Demo Videos:
    - http://youtu.be/bM5DKP4c4aw
    - http://youtu.be/YPorhOMzaKk
- Hands-on Demo: https://hxr.cise.ufl.edu/PrimeIII/
   - Access code: 0000

Anywhere Ballot

- Online ballot marking prototype

- Hands-on Demo: http://anywhereballot.com/

- Design principles: http://civicdesign.org/projects/anywhere-ballot/

Source
http://elections.itif.org/reports/AVTI-007-Chisnell-Davies-Summers-2013.pdf
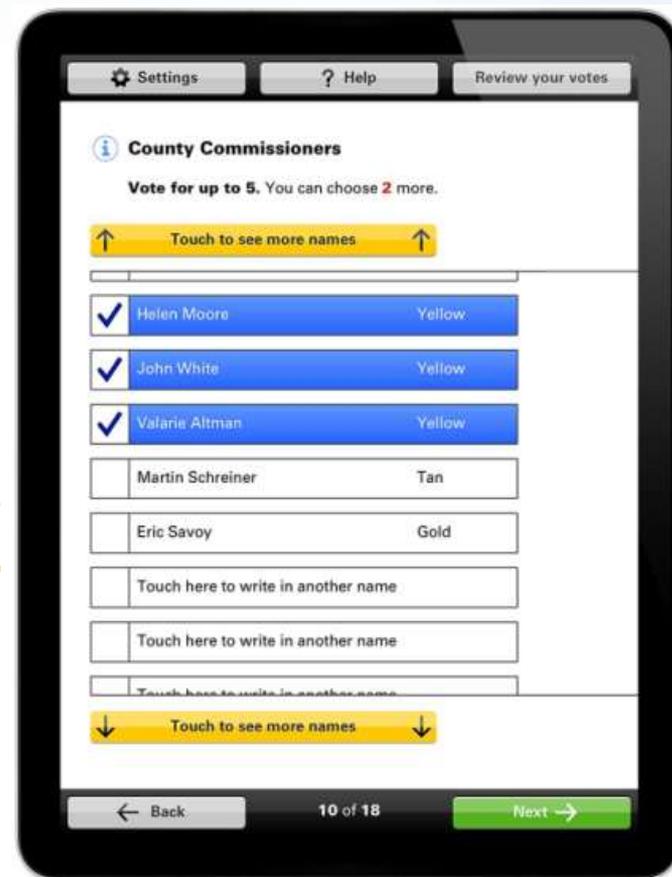
EAC AVTI website:

http://www.eac.gov/payments_and_grants/accessible_voting_technology_initiative.aspx