Research, Development, Testing and Deployment Efforts

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Background

- Accessible, Usable & Secure
  - 1st version 2003
- Multimodal
  - Touch, Voice, Switch, QR Code
- Tested with multiple, diverse demographics
- Software Independent
• Background
  – Funded by
    • National Science Foundation
    • U.S. Election Assistance Commission
    • Everyone Counts, Inc., ES&S & Intel
    • Auburn University, Clemson University, University of Florida
• Innovative Voting Technology

• How do you know that it works?

• Testing, Pilots, and More…
Testing - AIDB

• Alabama Institute for Deaf and Blind
Elections


- National Council on Independent Living (NCIL)

- Presidential Mock Election at Auburn University

- State of Oregon (May 2012)
Elections

- Self Advocates Becoming Empowered (SABE 2012 & 2014)
  - Ballot contained photos of the candidates

- Clemson Elementary School (2012)
Elections

- Wisconsin (April 2014)
Elections

• New Hampshire
  — September 9, 2014
  — Primary Election with Prime III

• New Hampshire
  — November 4, 2014
  — Mid-Term Election with Prime III
Pilots – Lessons Learned

• People First!
  – Relationship building is critical
  – Timing is everything
    • pick the right election at the right time with the right election officials

• Technology Second!
  – Test with diverse voters
  – Collect data and don’t be afraid to fail
  – Understand what has been done
Pilots – What’s Next?

• Prime III available for download
  – In discussions with Knight Foundation to fund Prime III for open source download
  – Possibly a Prime III portal

• Several Adjustments Required
  – Multiple language
  – Documentation
  – Ballot integration, i.e. XML, etc.
  – Which COTS devices work best? (WI Pilot)
Pilots – What’s Next?

- Optical Character Recognition (OCR)
  - Accuracy not good enough, but highly desirable over barcodes
  - Can OCR be improved to the level of accuracy as barcodes and optical scanners?
Sample Prime III Ballot

NIST Standard Ballot

1. President and Vice-President ==> Marzena Pazgier and Welton Phelps (W) 2176782336

2. US Senate (write-in) ==> Homer Simpson 888

3. US Representative ==> Bruce Reeder (Y) 3905

4. Governor ==> Alex Wallace (R) 16777216

5. Lieutenant-Governor (write-in) ==> Elizabeth Matthews 888

6. County Commissioners ==> Mary Tawa (P) 593
6. County Commissioners (write-in) ==> Chris Evans 888
6. County Commissioners (write-in) ==> Terra Branford 888

7. Proposition #1 ==> No 373

8. Amendment #1 ==> Accept 3618
Pilots – What’s Next?

• Informed Optical Character Recognition (iOCR)
  – Study underway with NIST standard ballot
  – Currently 100% accuracy
    • Errors are dumped for correction/observation

• Looking for iOCR Pilots
  – Let me know
Pilots – What’s Next?

• VoterPass™

• “And those lines, we’re gonna fix that”
  – President Obama
Thank You

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