

# U.S. VOTE FOUNDATION

**Susan Dzieduszycka-Suinat, President & CEO**

**U.S. Vote Foundation**

**[usvotefoundation.org](https://usvotefoundation.org) / [overseasvote.org](https://overseasvote.org)**

**Joe Kiniry, Principal Investigator**

**Galois**



Set Up Election



Distribute Ballots



Cast Votes as Intended



Record Votes as Cast



Count Votes as Recorded



Verify Votes Recorded as Cast



Announce Results

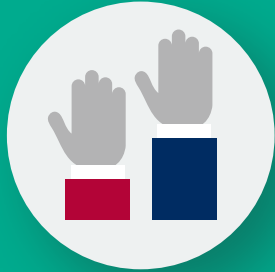
Allow Public to Verify Tally



# THE FUTURE OF VOTING

**END-TO-END VERIFIABLE  
INTERNET VOTING**

SPECIFICATION AND  
FEASIBILITY ASSESSMENT STUDY



# The Question



# Team of Rivals



# Consensus Reached!



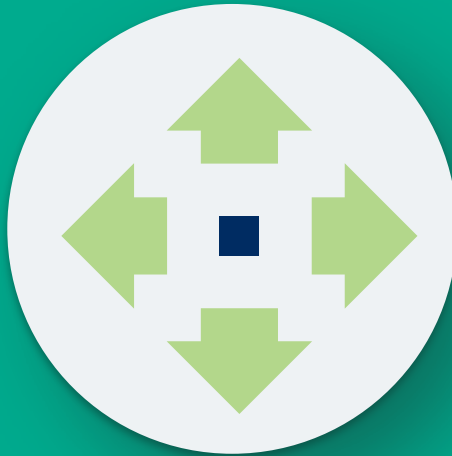


# Consensus

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# Unanimity

# Different Approach



# End-to-End Verifiable Internet Voting (E2E- VIV)

- Verify votes recorded as cast
- Verify system included votes in tally
- Verify recorded votes
- Confirm outcome of election



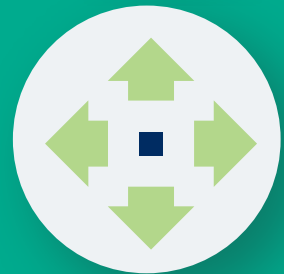
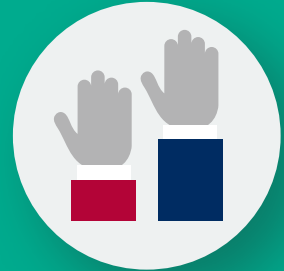


# Recommendation 1

- Any public elections conducted over the Internet must be end-to-end verifiable.

# Recommendation 2

- No Internet voting system of any kind should be used for public elections before end-to-end verifiable in-person voting systems have been widely deployed and experience has been gained from their use.



# Recommendation 3

- End-to-end verifiable systems must be designed, constructed, verified, certified, operated, and supported as high-assurance systems according to the most rigorous engineering requirements of mission- and safety-critical systems.



# Recommendation 4

- E2E-VIV systems must be usable and accessible.



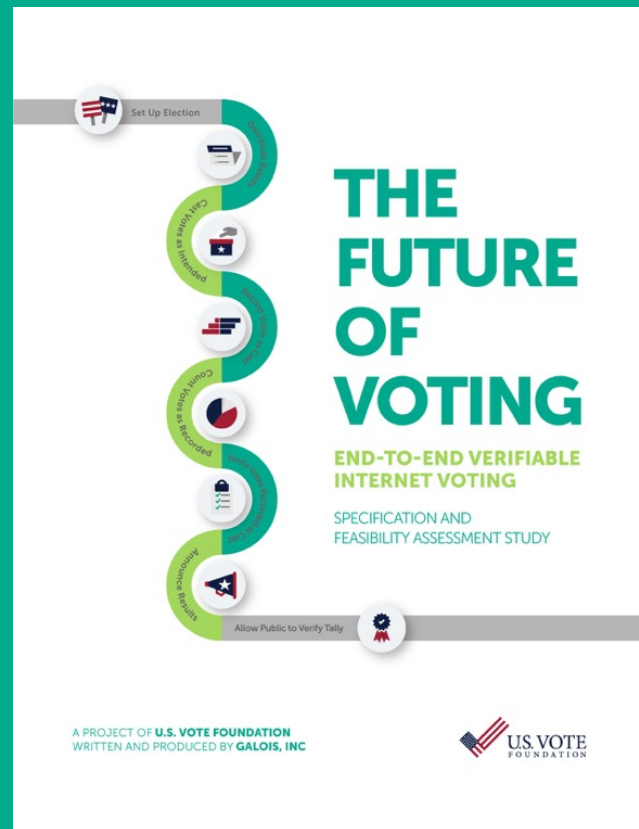
# Recommendation 5

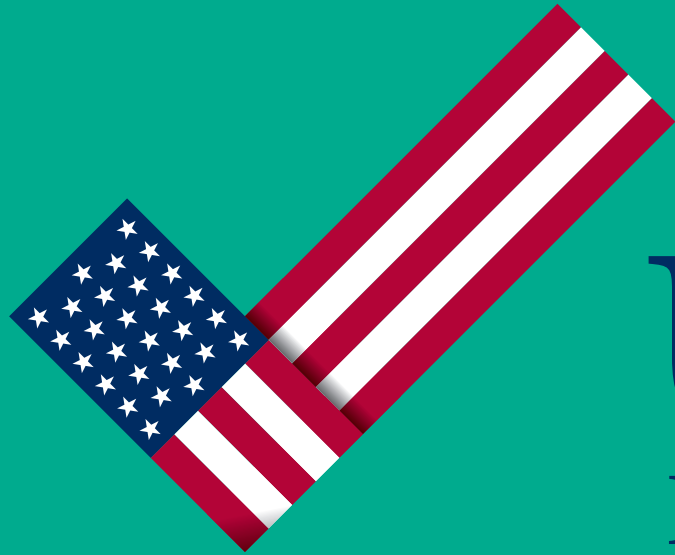
- Many challenges remain in building a usable, reliable, and secure E2E-VIV system. They must be overcome before using Internet voting in public elections. Research and development efforts toward overcoming those challenges should continue.



**Context is  
Everything**

# The Report





# U.S. VOTE FOUNDATION

**Thank you for joining us at NASS 2015  
Summer Conference, Portland, Maine**

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**DEMOCRACY  
FUND**

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