



“Exploring Alternative Methods and Goals for Federal Testing and Certification” Panel Discussion

NIST/EAC Future of Voting Systems Symposium

February 27, 2013





In the future, we may not be able to:

- separate the consequence of poorly performing election systems from well performing voting systems
- distinguish between poorly performed election administration and poorly performing voting and election systems





Emerging election systems provide inputs to, and utilize outputs of the voting system

The performance of these systems impact the operational accuracy and reliability of the voting system – and vice versa

Our testing strategies lack symmetry – we may be over-testing voting systems and under-testing election systems and the competencies of election workers





Systems

- A system is a collection of components (including subsystems) that transform inputs into outputs.
- Systems utilize feedback loops to monitor system states and adjust performance
- Systems maintain interfaces with other systems





System Components

- Hardware
- Software
- Data
- People
- Procedures





Voting Systems

- Vote Capture
- Vote Tabulation





Election Systems

Systems used to collect, store, compute, analyze, report, and disseminate data related to an election. Includes voter registration, digital pollbooks, ballot delivery and retrieval, election night reporting, ballot marking systems, voting systems, social media systems, candidate qualifying systems, etc.



Emerging Systems

Voter
Registration
Systems

Emerging Systems

Election
Reporting
Systems

Emerging Systems

Distributed
Voting
Technologies



Emerging Systems

Operations
Enhancement



Mature Systems

Voting System
Vote Capture/Vote Tabulation



Core Competencies of Election Officials and Election Workers



System Convergence

Voter
Registration
Systems

Election
Reporting
Systems

Distributed
Voting
Technologies

Operations
Enhancement

Voting System
Vote Capture/Vote Tabulation

Core Competencies of Election Officials and Election Workers

Voter
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Voting System
Vote Capture/Vote Tabulation





- A checkbox on RFP for system acquisition
- Indemnification
- Attestation that the required attributes of the system exist and function as intended
- Revelation of the architecture, behaviors, capabilities and limitations of the system that informs its proper use.





In the management of systems, we get what we inspect; not what we expect.

Many expected that after the implementation of the VVSG and a testing/certification program, we would get better elections.

We got better voting systems.

