ELECTION TECHNOLOGY COUNCIL

Working Together for Secure and Accurate Elections

Election Administration Security: Are You Ready and What's on the Horizon?

NACRC Legislative Conference
Washington, DC
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Who We Are

- The Election Technology Council (ETC) is a trade association of the leading voting system manufacturers representing 90% of the voting systems used in the United States;
- Current membership includes:
  - Election Systems & Software;
  - Hart InterCivic;
  - Premier Election Solutions;
  - Sequoia Voting Systems;
- Originally formed in 2003 under the Information Technology Association of America;
- In 2007, the members decided to form the ETC as an 501(c)6 trade association;

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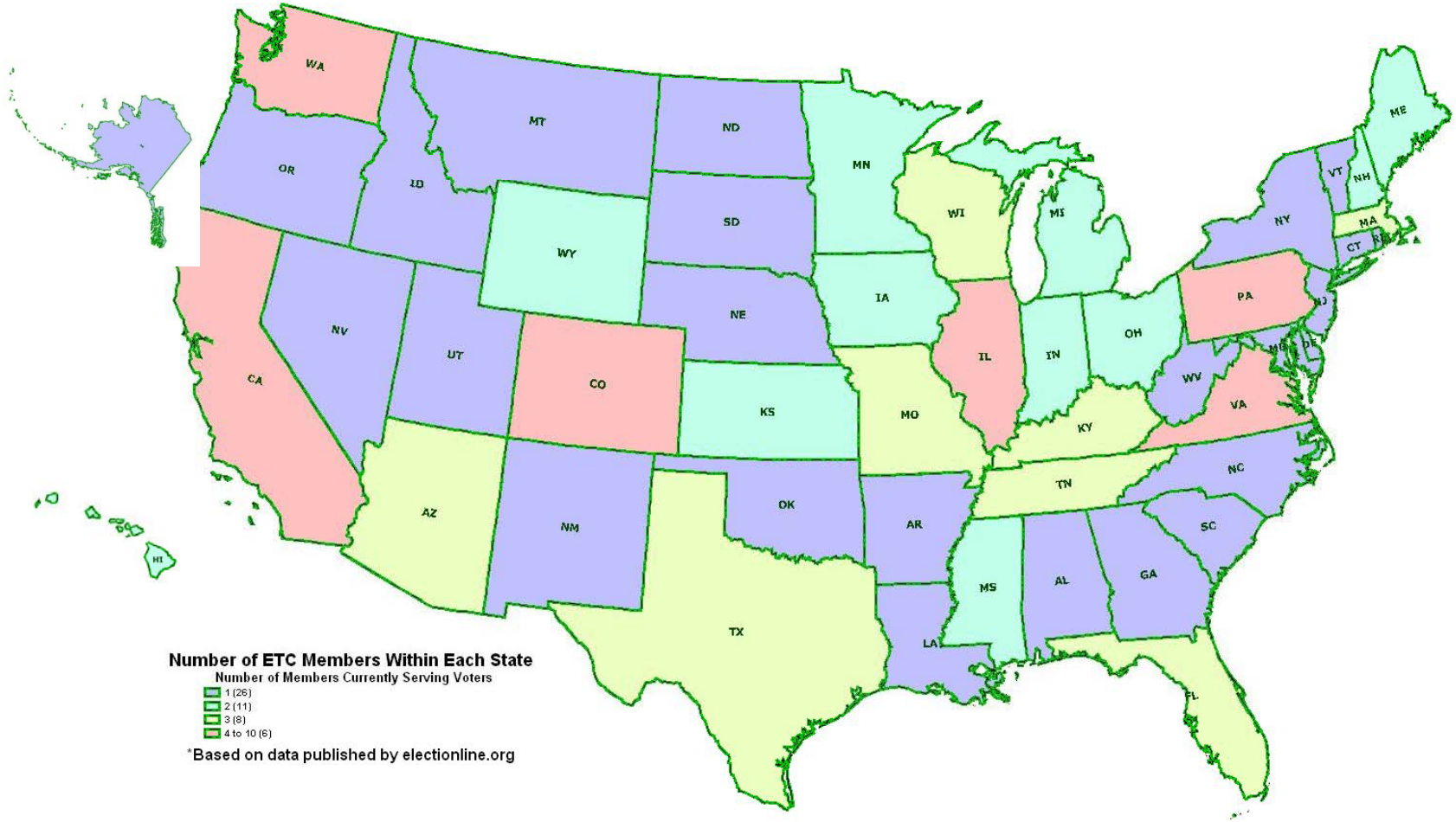
Election Technology Council-Coverage By State

All 50 States and the District of Columbia



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Primary Mission

- The primary mission of the Council is to serve as a resource for legislators, election officials, media and the public on the current challenges confronting the industry;
- The ETC addresses industry concerns with:
  - State and local election officials;
  - Capitol Hill;
  - The United States Election Assistance Commission;
    - Including advisory committees established under the Help America Vote Act in 2002;

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Current State of Technology

- All ETC members offer the following voting solutions:
  - Optical Scan paper based solutions;
  - Direct Recording Electronic (DRE) Voting Systems
  - Voter Verifiable Paper Audit Trails (VVPAT)
    - Supplement to DRE as a response to customer/state demands for a voter-verifiable record;
    - Intended to serve as an auditing mechanism, not the ballot of record;
    - Designed after-the-fact and is subject to its own product evolution;

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Current Industry Challenges

- Delays in the federal certification process;
- Competing forces of State compliance deadlines versus timely federal certification;
- Lack of industry involvement in the regulatory process;
- Financial barriers for current and new industry participants;
- Lack of consolidated approach for considering voting system performance / threat models;
- Timely upgrades and customer-driven enhancements;

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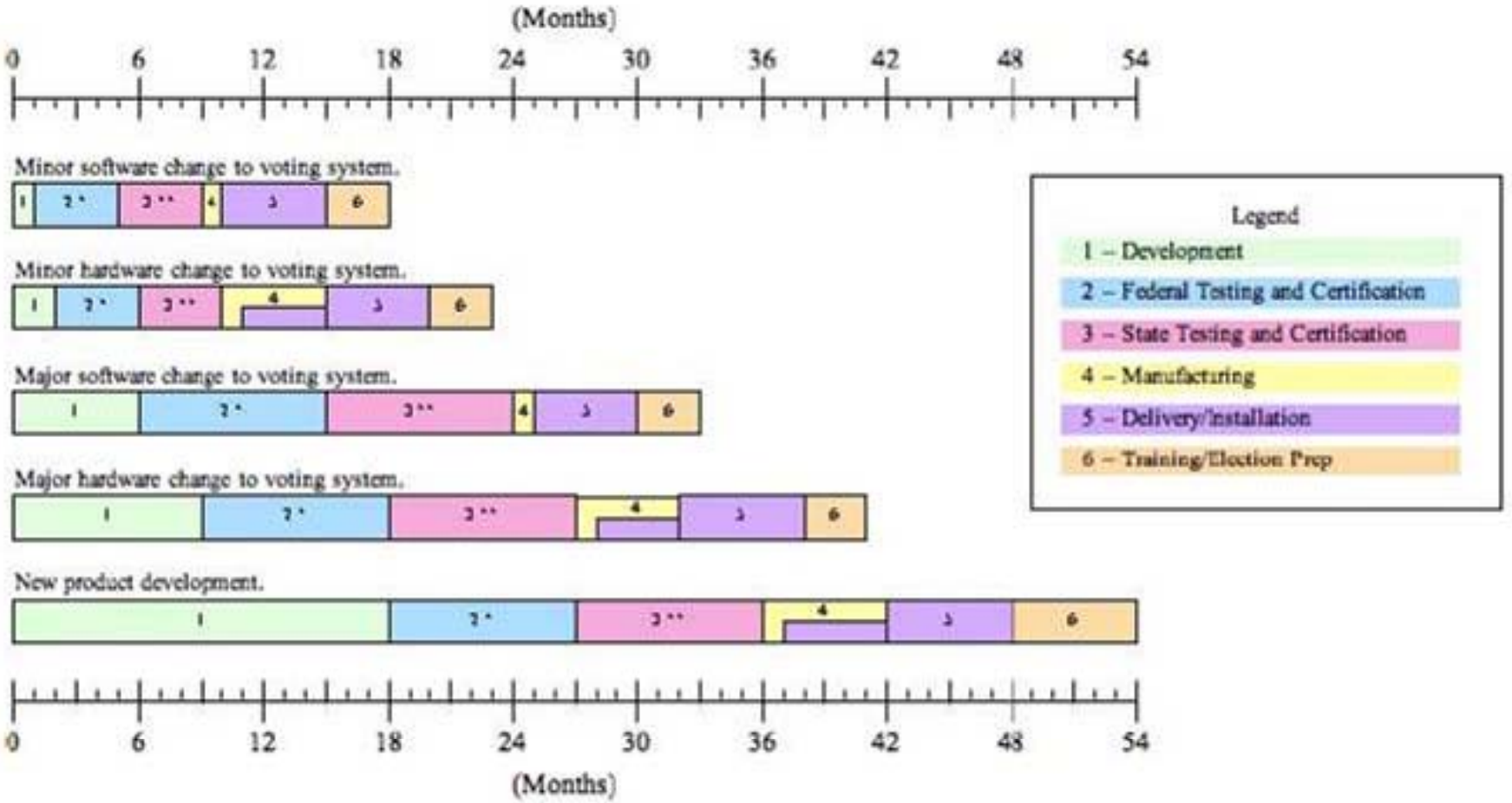
Current Industry Challenges

- Timelines for New Product Developments:
  - 18 months for Research and Development;
  - 18 months for State and Federal certification;
  - 12 months for Production and Delivery;
  - 6 months for Training and Election Preparation
  - *Total New Product Development cycle is 54 months;*
- Timeline for Minor Software Changes:
  - 18 months for entire process;
  - 50 States means 50 different ways to conduct elections;

Timelines to Implement Changes to Voting Systems



* Note: The EAC's program for certifying voting systems is a new program. There is currently no historical data to use as a basis for estimating timelines. The time required for Federal Certification may be shorter than projected above or longer based on the test plan for the proposed change. The time frames noted above include voting system testing at an EAC accredited laboratory.

** Note: State Certification time frames also vary from state to state.

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Current Industry Challenges

- Perceptions versus Facts
- No Security Threat Model has developed for electronic voting systems versus paper-based voting systems;
- It is difficult to develop products to meet moving targets;
- Industry has been responsive to customer demands:
  - Voter Verifiable Paper Audit Trails;
  - Deposit of Source Code with National Software Resource Library;
  - Working with State Election Officials during Top-to-Bottom Reviews;

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Preparing for the General

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Key Steps for Pre-Election Setup

- Acceptance Testing;
- Establish Clear Custody Controls;
- Pre-Election Hash Code Testing;
- Pre-Election Logic and Accuracy Testing
  - Purchase test ballots and prepare your own test ballots;
- Election Day Parallel Testing;
- Post-Election Hash Code Testing;
- Post-Election Logic and Accuracy Testing;
- Audits

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Responding to Perceived Threats

- "Safeguarding the Vote" also outlines the mitigating steps to respond to perceived threats of voting systems including such perceived threats as:
  - External Hackers into central tabulation;
  - Insertion of virus internally into central tabulation;
  - Insertion of viruses by poll workers;
  - Insertion of viruses through corporate malfeasance;

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Challenges for Election Officials & the Public

- Fears of the unknown impact perceptions;
- State legislative and administrative procedures may not be updated to reflect new technologies;
- These two factors create a perfect storm in a close election;
- Without clear guidance using new technology, local officials are forced to develop their own methods creating problems with uniformity;

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Suggestions for the Community

- Work with your provider to communicate your concerns;
- Start planning now;
- Schedule preventative maintenance or on-site support if necessary;
- Bring in county IT personnel to aid in the development of robust technical procedures;
- Remember: *Prevention and Detection* – Documentation is the key;