



ELECTION TECHNOLOGY COUNCIL

Working Together for Secure and Accurate Elections

Election Reform: Staying Ahead of the Trends

National Association of Counties
Washington, DC
March 3, 2008



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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 Solutions;
- 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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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;
 - Responsible for adopting voluntary voting system guidelines (mandatory compliance required in 40 States)



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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;
- Timely upgrades and customer-driven enhancements;



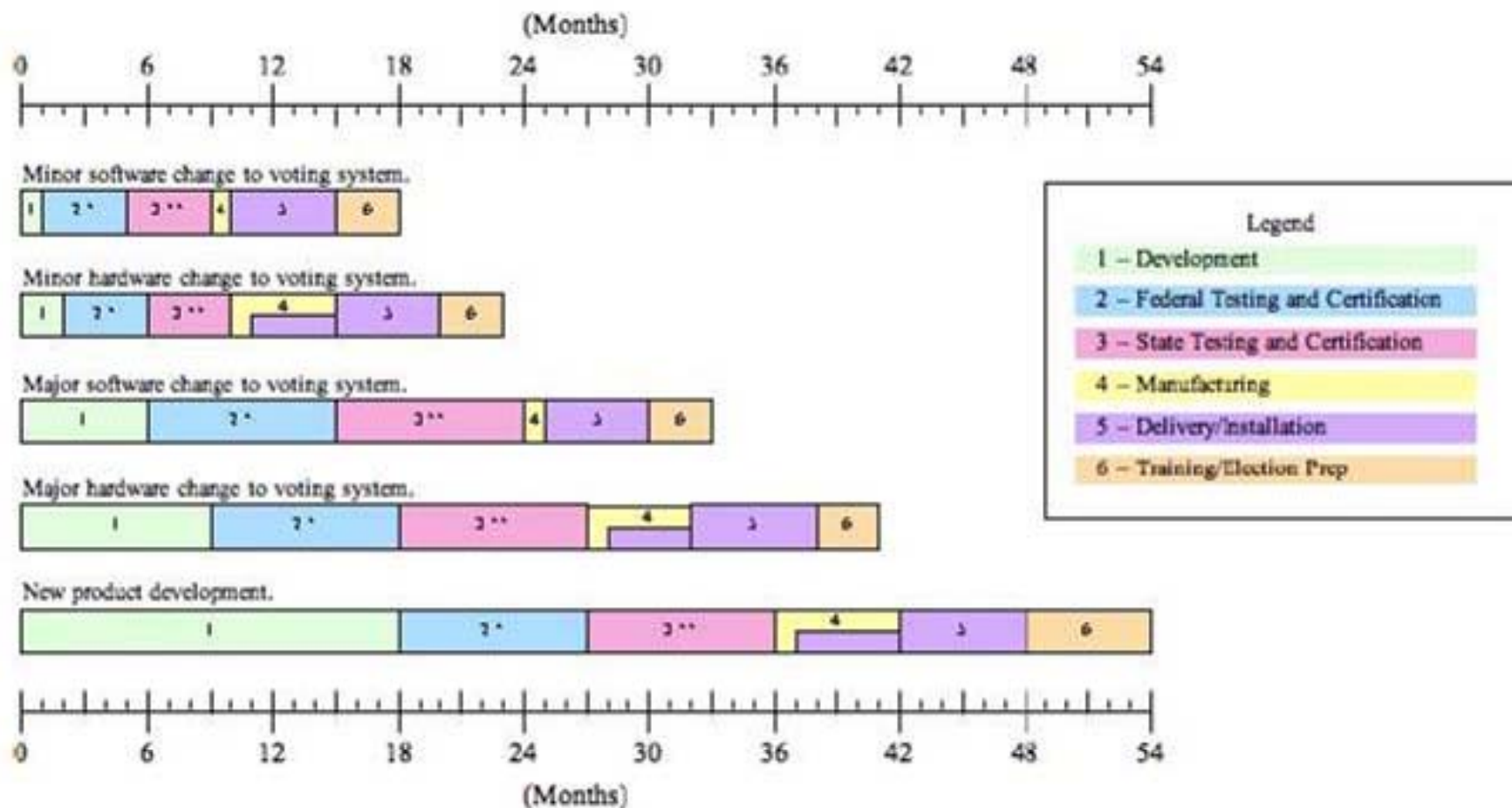
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Current Industry Challenges

- 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;
- 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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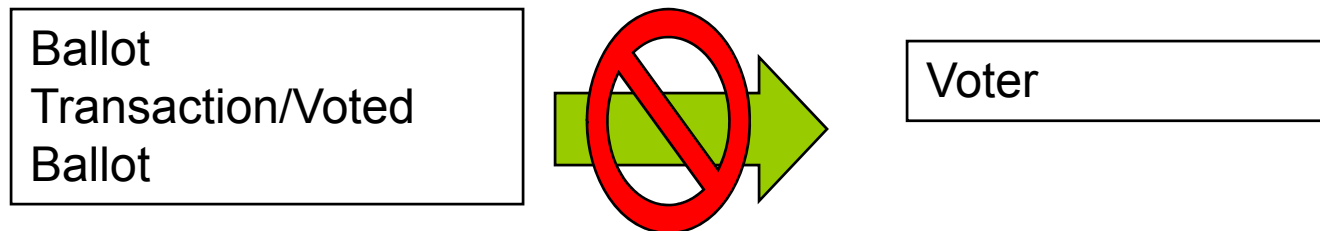
Current Trends

- Lack of understanding on the differences between a consumer transaction versus a voting transaction;

Business Transactions



Voting Transactions





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People, Process & Technology

- Acceptance Testing;
- Establish Clear Custody Controls;
- Pre-Election Hash Code Testing;
- Pre-Election Logic and Accuracy Testing;
- Election Day Parallel Testing;
- Post-Election Hash Code Testing;
- Post-Election Logic and Accuracy Testing;



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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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Looking to the Future

- Legislative proposals will respond to the successes/failures in the 2008 General Election;
- State driven “Top-to-Bottom” Reviews do not serve the process well;
- The EAC administered certification process must be given time to mature;
- The development and eventual implementation of voting system standards is still 3-4 years in the future;
- Patience is a virtue;