

# VotingSystems Management

Joint Legislative Oversight Committee on Information Technology March 19, 2008

Presented by:

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# North Carolina - 2000



- √ 18 Varieties of Voting Equipment
- ✓ Some Equipment 40 years old
- ✓ Variety of Firmware & Software
- ✓ Very difficult to train users
- ✓ Limited maintenance
- Minimal service from vendors
- ✓ Major Security issues
- ✓ No ADA compliance
- ✓ Ballot printing problems
- ✓ No vendor support
- ✓ Non-Compliant with EAC Standards
- ✓ No Software in escrow

# North Carolina - 2008





- ✓ 2 Types of Voting Equipment
- ✓ Equipment is < 2 years old
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- ✓ Firmware & Software uniform
- ✓ Easier to train users
- ✓ Yearly maintenance contract
- ✓ Full Service from vendor
- ✓ Secure voting system
- ✓ Full ADA compliance
- ✓ NO printing problems
- ✓ Full Vendor Support
- Compliant with EAC Standards
- ✓ All software/firmware in Escrow



# **Senate Bill 223**

The 2005 General Assembly passed, and the Governor approved, Senate Bill 223, which authorized the State Board of Elections to develop a certification process by which voting equipment and related software would be selected using on the following criteria:

- ✓ Ensure that all voting systems generate either a paper ballot or a paper record by which voters may verify their votes before casting them and provide a backup means of counting the vote that the voter casts.
- ✓ Include procedures to review source codes for software used in those voting systems.
- ✓ Uniform pricing for all county purchases of voting equipment.
- ✓ Software placed in SBE escrow account.
- ✓ Performance Bond of \$7,500,000.00 by voting system vendor.
- ✓ Require post-election testing of voting systems, including a paper sample-count.



# **Project Management Team**

The SBE contracted with a certified Project Manager to oversee the project.

- Request for Proposals (RFP) were developed.
- ✓ Vendor responses were reviewed.
- ✓ Vendor presentations were conducted.
- ✓ Five vendors were recommended for certification review.

### **RFP Evaluation Team**

The RFP Evaluation team consisted of the following North Carolina election experts.

- ✓ Larry Hammond Election Director, Bladen County Democratic
- ✓ Bill Peaslee State Republican Party
- ✓ Susan Adams Moore County Election Board Member Republican
- ✓ Chris Heagerty Executive Director, North Carolina Center for Voter Education
- ✓ Caroline Valand State Democratic Party
- ✓ Ron Broadnax Disability Representative (Blind)



# **Certification Process**

The certification process involved the selection of a certification team that included:

- ✓ State and local election officials
- ✓ State information technology officials
- ✓ Representatives from advocacy groups
- ✓ Consultants with professional and technical experience in the development and use of voting equipment and tabulation software Dr. Ted Selker, MIT & Steven Berger, IEEE.
- ✓ All voting equipment already in use in North Carolina was decertified on 12/31/2005.
- ✓ Election Systems and Software (ES&S), satisfactorily completed the certification process and was authorized to sell and to deliver voting equipment to counties in North Carolina.

### **Certification Team**

- ✓ Stephen Berger IEEE Certified EAC Advisor
- ✓ Dr. Ted Selker CAL-MIT Voting Project MIT Department Director
- ✓ Bob Phillips –Director, North Carolina Common Cause
- ✓ Linda Grist Cabarrus County Election Director, Republican
- ✓ Andrew Murray Caswell County Election Board Chairman, Democratic (ADA)
- ✓ Bill Peaslee State Republican Party
- ✓ Caroline Valand State Democratic Party
- ✓ Paul Meyer Legal Counsel, NC Association of County Commissioners
- $\checkmark$  Peter Capriglione Manager, Business Applications/Legislative Technologist,

General Assembly, North Carolina

- ✓ Brook Garrett-Jones SBE Staff, Election Technician
- √ Bob Rauf SBE Staff, IT Director



# **Equipment Rollout**

The rollout process began in early 2006 by establishing a partnership with an in-state subsidiary of ES&S.

Equipment was delivered to a warehouse in North Carolina and equipment was:

- ✓ Fully tested for operation and functionality.
- ✓ Delivered to each county and on-site acceptance testing completed.
- ✓ Equipment was in place in all 100 counties for the May 2006 Primary.
- ✓ Partnership with Printelect developed for election coding and printing.

# **2006 Elections**

Successful elections were conducted in the primary elections and general election with all training, election coding and ballot printing being successfully completed within the State of North Carolina utilizing our partnership with the in-state subsidiary of ES&S.



# **How Does the Current System Work?**

Building on the momentum of one of the nation's most successful statewide rollouts of voting equipment in history, North Carolina officials recognized the need to review existing safeguards as well as to implement new safeguards to protect voters and their ballots. Understanding that there are wide differences in size, resources, and staff among the 100 counties, these safeguards do allow some basic flexibility in implementation; however, as with all state mandated guidelines, the expectation is that in all cases, minimum standards are met.

The current safeguards for voting equipment used in North Carolina can be grouped in the following categories:

### General Safeguards -

- ✓ Software, firmware and hash codes are secured in Escrow Account.
- ✓ Dedicated Project Management Team utilizing best practices.
- ✓ District Election Technicians providing voting equipment and software support to county boards of elections.
- ✓ Wellness Checks to determine the level of legal compliance with election laws in all 100 county offices.
- ✓ Precinct Uniformity Project that identifies key areas in election management and consolidates the best practices in execution of state and local policies.



# Equipment Safeguards -

- ✓ Bi-annual equipment inventories.
- ✓ Centralized tracking of equipment repairs and/or replacements.
- ✓ Centralized tracking of problems/issues before, during and after the election .
- ✓ Stand-alone equipment and tabulation system.
- ✓ Yearly equipment maintenance.
- ✓ Strict Storage & Security standards.
- ✓ Automated backups for election results.
- ✓ Multiple memory storage locations for election results.
- ✓ Logic and Accuracy testing of all equipment.
- ✓ Mock Elections.
- ✓ Paper Trail Requirement.
- ✓ Maintaining an open process.



# Voting Safeguards -

- ✓ Development of statewide ballot templates.
- ✓ Centralization of ballot coding and printing.
- ✓ Election Day support.
- ✓ The ATV (Authorization to Vote) process.
- ✓ Election Audit (Pre-Canvass)
- ✓ Election Audit (Post Canvass).
- ✓ Post election sampling.
- ✓ Recount provisions.
- ✓ Maintaining an open process.



# **Improving the Process: What's Next?**

#### Regular review of certification process and equipment -

A major commitment by the State Board of Elections to North Carolina voters is a regular review of federal standards and determination if currently certified equipment still meets the most current standards in terms of hardware and software. Whenever there are changes to federal standards, North Carolina is committed to adopting the newest federal standards and ensuring that only equipment meeting those standards is certified for use in the state.

#### Continue to improve current processes -

After one of the most successful statewide rollouts and several successful election cycles, there is documented proof that current processes in place are working; however, continued success is dependent on how well processes are monitored and improved.

#### Adapt to changes in demographics, voter needs, and technology -

North Carolina's population is changing constantly and current trends suggest that voters want more flexibility in when and where they cast their votes. Voter registration statistics also indicate a move from a two party system to an increasing influence on elections by unaffiliated voters. This makes it more difficult to plan for ballot printing and turnout especially considering North Carolina's semi-open primary system (political parties have the option of allowing unaffiliated voters to participate in their respective party primaries). It is necessary that trends be considered when determining what direction to take election laws and policies.



#### **Identify our weakest links and seek solutions** –

In terms of voting systems, the main areas of concern continue to be access to adequate polling places, the recruitment of qualified poll workers and adequate funding for updating, maintaining certified voting equipment and election day support of technicians and rovers. Space for election day voting is at a premium in both urban and rural areas. Promotion of one stop voting absentee voting and efforts to centralize voting places may be future solutions but only after careful planning.

#### **Public relations** –

North Carolina election officials take pride in keeping election processes open to the public. The success of the voting equipment certification process and subsequent rollout is due in part to public involvement. It is vital to continue to keep the public apprised of changes to standards, certified equipment and resulting safeguards.

In the future the SBE would like to move to open source coding for election software and firmware.



### **District Election Technicians - DET**

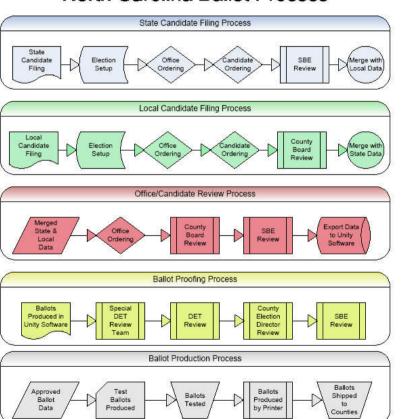
The SBE employs 8 DET's working on-site in each of the election districts. Assists in the election coding, support and testing of voting systems. Provides voting equipment hardware and software support. ☐ Reviews ballots for proper content and layout. ☐ Supports logic and accuracy testing of voting equipment. ☐ Provides technical advice on software packages, and disaster recovery. ☐ Assists in Wellness Checks (Audit of County Board of Elections). ☐ Assists in monitoring Agency based registration. Conducts Acceptance Tests on new voting equipment. ☐ Conducts semi-annual inventory of voting equipment. ☐ Assists in the Web Based Election Tool training. Provides updates to the voting equipment instructions and manuals. Provides on-site training to county election staff, precinct officials and the voting public. ■ Assists in GoToMeeting training sessions for new county election staff.



# **North Carolina has Complex Elections**

- □ 100 counties and 1 Municipal board
- $\supset$  > 5,683,000 registered voters
- □ Over 2,771 voting precincts.
- □ 300+ One-Stop locations
- $\Box$  In excess of 1,000 possible split precincts.
- ☐ Ballot styles range from 3 to >100 per county.
- ☐ The SBE & CBE will train in excess of 20,000 election pollworkers for the 2008 General Election.

#### North Carolina Ballot Process





# What's New in 2008?

WEBEX Tracking System -

Project Management Control -

On-line Pollworker Training -

**Uniform Election Reporting -**

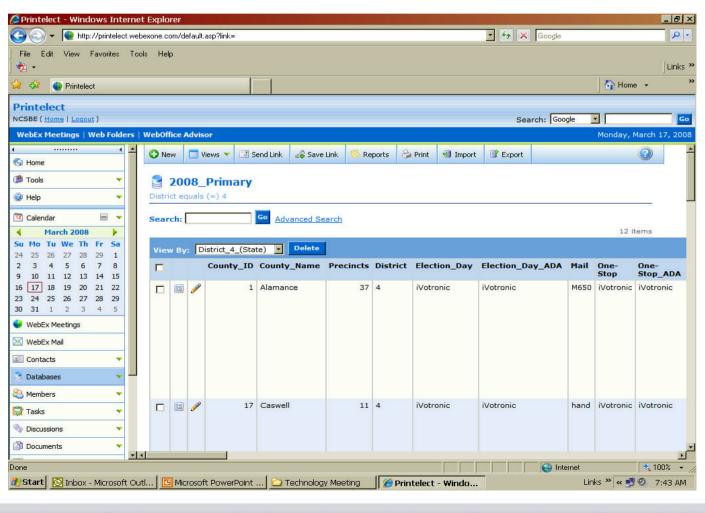
State Data Management -

Statewide Support Module -

Additional Training -



#### **WEBEX Tracking System**

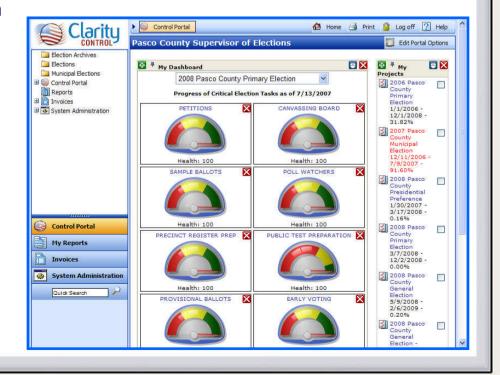




# ClarityCONTROL Every Day Election Task and Calendar Management

- Role specific "Dashboards"
- **Dynamic Election calendar**
- Project Management built for Elections
- **True cost analysis** of Election preparation
- Role specific views and notifications





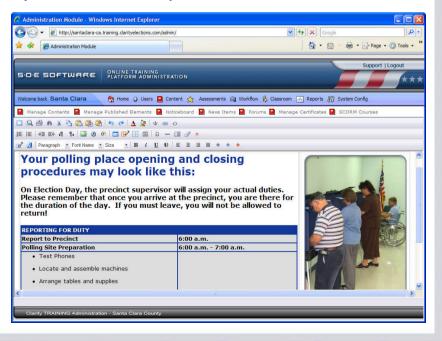


# **ClarityTRAINING**

Election Officials and Pollworker Training Management

- Convenient Self paced and flexible
- Manage Poll Workers, Classrooms, Instructors, and Class Schedules
- Audit Trail Measurable assessments, reporting and monitoring
- **Standardized** Provides a proven standard in quality of material and presentation
- **Customizable** to County needs







# **ClarityENR**

Election Night Reporting for Real-time Results

- Easy requires limited IT
- View Provides a visual representation of tabulation progress
- Map Display Visual display on county map of precincts reporting
- Standard The state and county election night reports are in a standard format
- **Display** Colors are customer defined





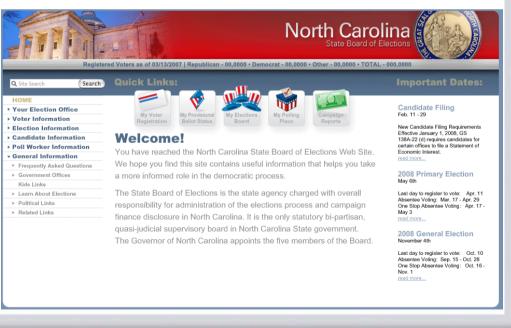


# **ClarityCONNECT**

Online management of State and County election data

- **Customizable** Easily managed without "IT" involvement
- Personalized Display voter specific information
- **Ballot Style Lookup** Voters are able to review a ballot style prior to going to the polls
- Answers Dynamically searchable voter statistics and historical archives







# **ClaritySUPPORT**

Online management of State and County election data

- Intuitive Call Center Support
- Real-time Incident Reporting
- Polling Location Open/Close Status
- Track Issues from Call to Resolution







# **AdditionalTRAINING**

- The SBE is sponsoring pollworker training at NC Community Colleges.
- GoToMeeting Training for CBE's and DET's.

