Where Do We Go From Here?
(A Proposal Based on PCEA & Where We Have Been)

Technical Guidelines Development Committee
July 20th, 2015
2011

- TGDC last met in December of 2011
- Let's do a quick recap of what has happened since...
2012:
According to survey data, although most voters waited for less than 15 minutes in order to vote, there were 5 million voters who waited more than an hour—up to 7 & 8 hours in some places, and an additional 5 million who waited more than 30 minutes.
Executive Order

THE WHITE HOUSE,
The Executive Order focused the Commission’s work on several areas of concern:

i. the number, location, management, operation, and design of polling places;
ii. the training, recruitment, and number of poll workers;
iii. voting accessibility for uniformed and overseas voters;
iv. the efficient management of voter rolls and poll books;
v. voting machine capacity and technology;
vi. ballot simplicity and voter education;
vii. voting accessibility for individuals with disabilities, limited English proficiency, and other special needs;
viii. management of issuing and processing provisional ballots in the polling place on Election Day;
ix. the issues presented by the administration of absentee ballot programs;
x. the adequacy of contingency plans for natural disasters and other emergencies that may disrupt elections; and
xi. other issues related to the efficient administration of elections that the Co-Chairs agree are necessary and appropriate to the Commission’s work.
The Co-Chairs
Formerly the General Counsels for competing Presidential campaigns, the Co-Chairs bring bipartisan leadership to the Commission.

Robert F. Bauer
Co-Chair and Member

Benjamin L. Ginsberg
Co-Chair and Member

Full biographies are available at www.supportthevoter.gov
Meetings In:
- Alaska
- Washington
- California
- **Colorado**
- Kentucky
- Georgia
- **Ohio**
- **Florida**
- **Pennsylvania**
- New York
- DC
But we heard from officials in all of these states*: 

*according to my notes
Public Hearing Format:
1) State & Local Election Officials
Public Hearing Format:
2) Academics & Topical Expert Testimony
In Ohio we had our only 2-day hearing with the first day being solely devoted to voting technology:

State and Local Election Officials
Scientists from NIST
EAC Certification Leaders
Testing Laboratory Representatives
Usability Experts
Manufacturers
Academics

Cincinnati Hearing
Public Hearing Format:
3) Public Testimony

Miami Hearing
Survey of Local Election Officials

Charles Stewart III
MIT
December 3, 2013

Full presentation is available on the website.
Q16. Looking forward, over the next 5 to 10 years what areas of election administration are in significant need of improvement or an upgrade? (Choose 3)

<table>
<thead>
<tr>
<th>Area</th>
<th>All</th>
<th>Smaller Jurisdictions</th>
<th>Larger Jurisdictions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Voting tech. &amp; voting machine capacity</td>
<td>24.3%</td>
<td>24.1%</td>
<td>36.9%</td>
</tr>
<tr>
<td>2. Availability of poll workers</td>
<td>21.9%</td>
<td>22.2%</td>
<td>9.2%</td>
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<tr>
<td>3. Voter education</td>
<td>17.9%</td>
<td>18.1%</td>
<td>7.7%</td>
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<td>4. Training/management of poll workers</td>
<td>11.4%</td>
<td>11.4%</td>
<td>12.3%</td>
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<tr>
<td>5. Postal service issues</td>
<td>10.2%</td>
<td>10.2%</td>
<td>12.3%</td>
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<tr>
<td>...</td>
<td></td>
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<tr>
<td>10. Availability of polling places</td>
<td>6.5%</td>
<td>6.4%</td>
<td>15.4%</td>
</tr>
</tbody>
</table>
What did we hear?

- Jurisdictions are struggling with resources:
  - lack of,
  - quality of,
  - distribution of,
  - & options available to them in the current market.

- Concern with the stymied standard setting process and potential impact on voting equipment certification for new innovations.
What did we hear?

- After the passage of the Help America Vote Act (HAVA) there was an influx of federal dollars to upgrade voting equipment.
- That equipment has been aging at a consistent rate across the country and is now 10 years old and counting.
- Replacement is necessary, and soon.
- Jurisdictions need a nimble process at “election-speed” (others would even prefer “technology-speed”)
What did we hear?

- Jurisdictions want to utilize new technology to provide services to their voters.
- The voters are increasingly expecting their voting experience to be familiar—to be able to vote on a machine or devise that is as easy to use, and may actually be, their tablet or smartphone.
Balance

- But technology can’t solve all our problems, all the time.
- There will continue to be exceptions that will need to have unique solutions.
- Does this necessitate strict uniformity to that, perhaps “less-than-perfect” solution?
What did we hear?

- Security vs. Access (this hasn’t changed)
- One size does not fit all (this hasn’t changed either)
What did we hear?

- When are the Election Management Guides going to be updated?
- Are there any new Quick Starts coming?
- Don’t change the questions on the EAVS!
Last year we met in the White House on January 22, 2014 for a little more than half an hour. It was obvious from the questions that they had both read the report. The Vice President took notes.
The Recommendations in the Report

- Many of the recommendations have technology ties:
  - Voting equipment standards, testing, & certification
  - Voter registration
  - Data sharing
  - Electronic pollbooks
  - Vote Centers/Early Voting
  - Auditing
Even amidst the diversity of local jurisdictions, similar types of jurisdictions... often share similar problems and can learn from each other about the best solutions to common problems.
It is about the common functions of conducting an election that can be scaled to fit the jurisdictions needs.
Richland County, SC now tracks their results cartridges using pigeon cubbies in their tabulation room.
2014: Commission on Political Reform

- Commission on Political Reform chaired by:
  - Former Senator Olympia Snowe,
  - Former Senate Majority Leader Tom Daschle,
  - Former Senate Majority Leader Trent Lott,
  - Former US Secretary of Agriculture and Representative Dan Glickman,
  - Former Governor of Idaho and US Secretary of the Interior Dirk Kempthorne.
It is important to note that the Report received bipartisan support for many of the PCEA Recommendations.
Key Recommendations:

- Voter Registration Modernization:
  - Online voter registration
  - **INTRA**state, list efficiencies including Department of Motor Vehicles and other government agency data transfer improvement in compliance with the National Voter Registration Act (NVRA)
  - **INTER**state, statewide voter list comparisons:
    - Interstate Voter Registration Cross Check (IVRC)
    - Election Registration Information Center (ERIC)
- Address the pending voting equipment crisis & reform of the standard-setting and certification of voting equipment.
Key Recommendations:

- **Reform** of the standard-setting and certification of voting equipment.
- Minimum, quorum of EAC Commissioners not necessary for standard setting – *let the Boards continue their work*
Key Recommendations:

- Expansion of voting opportunities before Election Day & improvement to polling locations such as schools having an in-service day on Election Day, *use of vote centers*, etc.
Many states allow for the use of Vote Centers to service voters, with more going that route every year.

Vote Centers do require the ability to service all voters for a jurisdiction at every location so there are challenges that technology mitigates.

Is there a need for the standards to encompass some of the peripheral technologies? Some states say “Yes” and some say “No”.
The discussion on EPBs and other peripherals gets particularly interesting if the EPB is tied into the generation of the DRE ballot card or interfaces with the actual voting equipment.

Does this make it part of the “voting system”?

But many jurisdictions are using EPBs for so much more than just a roster/registers.
Many jurisdictions have created their own in-house technology while others have taken advantage of the burgeoning market.

Orange County, FL created an ePollbook solution as well as a line-tablet for looking up voters prior to checking them in to ascertain if they are in the correct polling place & capture wait time data for their website.
Connectivity at the polls isn’t the only consideration, so is interoperability within a voting system.

IEEE VSSC 1622 working group has started the process to define a common data for EPBs.

- Will this encourage interoperability?
- How can further data collection and analysis?

How will the next VVSG address systems with component testing &/or commercial off-the-shelf technologies?
Process Interactions
Most, but not all, jurisdictions do some sort of audit:
- Logic and Accuracy testing of voting equipment
- Reconciliation audit of precinct turnout & ballots cast
- Hand-count audits
- Risk-limiting audits
Reconciliation audits are much improved with the move to ePollbooks from paper-based systems.

It is important to know before the official canvass that all ballots were accounted for.

Are there any standards implications for audit technologies?
Bipartisan Policy Center

- Technology efforts:
  - Council of State Governments working groups on PCEA recommendations for UOCAVA voters (policy & tech)
  - IEEE VSSC 1622 efforts
  - Usability & Accessibility Roadmap
  - Ongoing vendor conversations
  - Pew VIP & ERIC
  - Overseas Vote Foundation E2E VIV
  - NASED working group
NASED

- Working group was comprised of State Elections Directors seeking to identify a path forward for the states
  - 1) If there is an EAC (at the time the group began there wasn’t much hope in nominations, let alone confirmations).
  - 2) If there isn’t an EAC—what do the states do?
- Because of this last quandary, we needed to really understand the scope of reliance on federal work.
First inclination: CUT IT IN HALF! IT’S TOO LONG!
National Conference of State Legislatures (NCSL)

- NCSL has been looking at technology and the manner with which the states are addressing (or not) the certification of their voting equipment via legislative action
- (Equipment replacement funding is another focus.)
Categories of Reliance: Established by the EAC

- Require Federal Certification
- Require Testing to Federal Standards
- Require Testing by Federally Certified Laboratories
- No Reliance

Voting System Testing & Certification

No Federal Requirements: Relevant state statutes and/or regulations make no mention of any federal agency, certification program, laboratory, or standard.

15 states have no federal testing or certification requirements: AK, AR, FL, KY, ME, MI, MT, NE, NH, NJ, OK, OR, VT. (Note: American Samoa, Guam, Puerto Rico and the Virgin Islands are also in this category.)

Requires Testing to Federal Standards: Relevant state statutes and/or rules require testing to Federal voting system standards. (States reference standards drafted by the Federal Election Commission (FEC), National Institute of Standards and Technology, or the EAC.)

9 states = DC requires testing of voting systems "to Federal standards": CT, DC, HI, IN, KY, NV, NY, TN, TX, VA

Requires Testing by a Federally Accredited Laboratory: Relevant state statutes and/or regulations require testing by a federally or nationally accredited laboratory to Federal standards.

13 states require voting systems be tested by a federally accredited laboratory: AL, AZ, IL, IA, LA, MA, MD, MN, MS, MO, PA, RI, WN

Requires Federal Certification: Relevant state statutes and/or rules require voting systems be certified by a federal agency:

13 states require federal certification first (states as noted): CO, DE, GA, ID, NC, ND, OH, SC, SD, UT, WA, WV, WI

Abbreviations:
ADA – Americans with Disabilities Act
DOJ – Department of Justice
EAC – Election Assistance Commission
FEC – Federal Election Commission
HAVA – Help America Vote Act
ITA – Independent Testing Authority
NASED – National Association of State Election Directors
NIST – National Institute of Standards and Technology
SBE – State Election Board
SEC – State Election Commission
SOS – Secretary of State
VVRAT – voter verified paper audit trail
11 States & DC Require Federal Certification
10 States Require Federal Standards
13 States Require Federally Certified Labs (VSTLs)
Federal Ties

Standards Certification VSTL
Standards Reliance

- AK, AR, KS, MI & MS semantically federal standards (IE HAVA, FEC, NASED).
- CA it is the floor of their standards.
- FL uses portions of the VVSG.
- NH doesn’t have a set of standards in statute but will use sections of the VVSG as well as looking at what other states the equipment is certified in and how they tested it.
Certification

- NE: While not required in statute, Nebraska does require federal certification before a system can be used in their state. They require federal certification through internal policy.

- ME: Maine doesn’t require federal testing by statute but required EAC certification in their last RFP.

- MT: Statutorily, Montana does not have to have Federal certification prior to certifying a voting system for use in Montana. However, as a practical matter they have always relied on the testing that goes into Federal certification.

- NJ: does require testing to the federal guidelines. It is not in statute but rather a de facto requirement established by the voting machine examination committee.
NASED & PCEA Co-Chairs

- As the NASED group worked, EAC Commissioners were nominated.
- NASED, and the PCEA Co-Chairs drafted letters recommending actions for the EAC to take (if they were confirmed).
- Hope: Hit the ground running.
On December 16th, 2014—literally in the final hour of the Senate-- there were 3 EAC Commissioners confirmed.

THIS ALMOST DIDN’T HAPPEN
Future of Voting Systems Symposium II was held in DC in February and served as a great start to year with new Commissioners in place.
March 19, 2015 “Priorities, Policy, and Strategy: Next Steps for the EAC” roundtable with PCEA Co-Chairs and Commissioners
The EAC has already:
- VVSG 1.1 approved
- Testing Manual changes approved
- New VSTL certified
- Chain of command established for future
- Boards all reconvened
- General Counsel being sought
- Executive Director being sought

**IN FIRST SIX MONTHS**

Standards & Certification

All of the items in the NASED & PCEA letters were addressed in the very first meeting.
Test manual changes will speed up the testing and certification of new systems as well as modifications:

- EAC has had a certification completed in 12 DAYS—the average should be in weeks for mods, months for new systems (NOT years)
- Election officials, in general, do not know this story.
It is important to also note that the State Certification Conference continues to grow.

In May of this year there were representatives from more than half the states at the meeting in Seattle.
Direction for Standard Improvements

- There have been other areas identified where improvements can be made:
  - Process of writing the standard (IE public comment period, frequency of boards meeting & pace of work)
  - Format of the standards (plain language summary, test assertions, etc.)
  - Time for certification (triage, vendor preparedness, self cert?)
  - Innovation class
2 short years since PCEA report was written...

- The voting technology market is changing:
  - Software-based solutions
  - COTS elements
  - Shifting of the ballot marking process to off-site

- Systems now on the market incorporate many of the recommendations in the Report, address some of the concerns of election officials, and meet *some* of the voter’s expectations.

- Possibly they introduce issues that are still surfacing?
May 2015: Denver conducted a pilot election that I don’t think we thought possible when the PCEA was holding our hearings and writing the Report, or perhaps when the last TGDC last convened.
Voters across the state can go into any vote center leading up to and including Election Day to vote in person.

All vote centers statewide are tied into the state VR system in real-time.

Voters had choice of paper (BOD) or electronic ballot options.

If the later, in the voting booth the voter made their selections on a COTS tablet which printed to a COTS printer...
Central tabulation (CO has a mail ballot delivery system to all voters in the state) was also conducted all on COTS scanners.
Consider the role of the VVSG & how to ensure that it stays relevant & ahead of the curve.

How does it best serve election officials (& voters) in projects like LA & Travis?

How can it prevent that from being necessary?
You’ve been given a great opportunity—one that almost didn’t happen...
Consider how to re-envision the work.
Incorporating new ideas and approaches without sacrificing the work already done.
carpe diem *Latin*,
sieze the day